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Since 1984

Educational Products Featuring products from ELENCO®

Award-winning

PRICE GUARANTEE MATCH *

Snap Circuits® Motion

Deluxe Snap Rover®

Science & Project Labs

Engino®

"Play to Invent" Toys

Save up to $30.00 INSTANTLY by ordering on our WEBSITE www.cs-sales.net

See page 38 for coupons.

*** WE WILL PRICE MATCH!**

Details on website

Award-winning

OWIKIT® Solar Kits

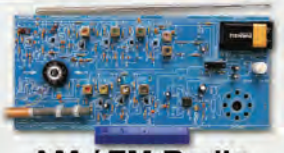
OWIKIT® Robotic Kits

Strandbeest

Rhino Mini Beest

Jr Scientist Series

ELENCO® velleman®



AM / FM Radio

Soldering Hobby Kits

Educational, Science, Electronics, Toys, Test Equipment, & Tools!

SPECIALS ON THE WEB!

Order online 24 hours a day

www.cs-sales.net

Catalog #61 - "Don't forget the Dash-"

Order Toll-Free Call

(800) 292-7711

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Since 1984

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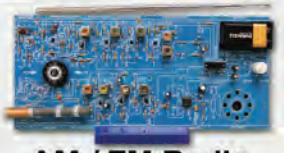

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Order online 24 hours a day

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48 Hours Shipping on in-stock items

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Since 1984

150 Carpenter Ave. Wheeling, IL 60090

100% Satisfaction GUARANTEED Lowest Prices

NEW!

SNAP CIRCUITS® MOTION

PRICE GUARANTEE MATCH

BUILD OVER 165 EXCITING PROJECTS

$84.95

CONTAINS OVER 50 PARTS

FEATURES:

- Color changing lighted fan
- Air "fountain"
- Motion Detector
- Mini car
- Crawler
- Various gears and pulleys
- And so much MORE!!

Model SCM-165

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PRICE GUARANTEE MATCH *

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Like us on Facebook® and SAVE MONEY! Visit www.cs-sales.net for details.

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SNAP CIRCUITS® LIGHT

Contains Over 60 Parts
Including:
- Infrared detector
- Strobe light
- Color changing LED
- Glow-in-the-dark fan
- Strobe integrated circuit (IC)
- Fiber optic communication
- Color organ controlled by iPod® or other MP3 player, voice, and fingers
- Pre-punched patterns for motor

Build over 175 projects
Including:
- Color Light
- Light Show
- Color Oscillator
- Triple Blinker
- R/C Blink & Beep
- PNP Amplifier

Requires four (4) "AA" batteries.

Model SCL-175
with over 175 projects

$84.95

PRICE GUARANTEE MATCH

BEST SELLER

Watch and be amazed at what your music can do with the new Snap Circuits® LIGHT®. Connect your iPod® or any MP3 player and enjoy your music as the lights change to the beat. The strobe light with spinning patterns will amaze you with its visual effects.

SNAP CIRCUITS® SOUND

Buy both and save with our SCC-350 combo see page 11

Contains over 40 parts
Including:
- Keyboard with optical theremin
- Echo effects
- Voice changer: record voice or music and play it back at different speeds
- Sound energy demonstration
- Connect to your smart phone and analyze sounds with apps.

Build over 185 projects
Including:
- Electronic Keyboard
- Light & Sound
- Voice Changer with Echo
- Audio Amplifier
- Clicker
- Water Alarm

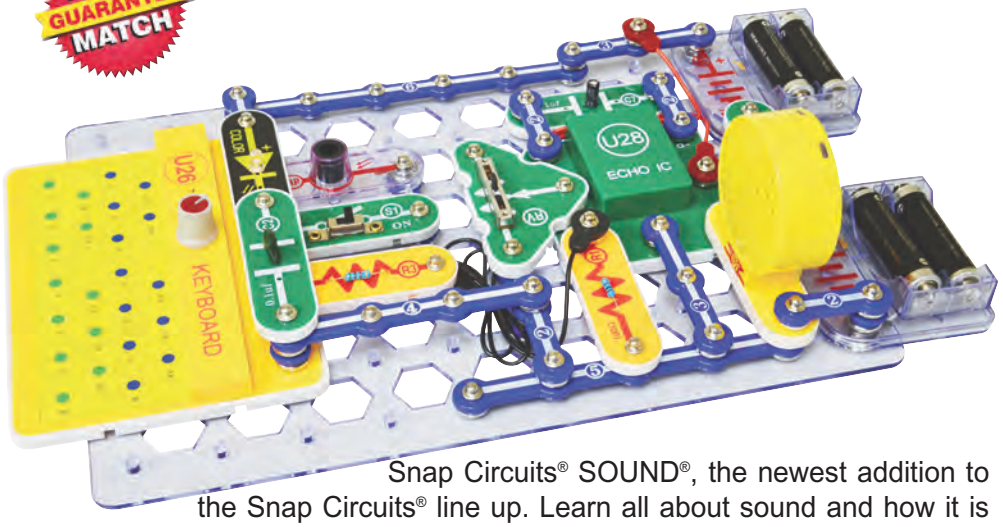
Requires four (4)"AA" batteries.

Model SCS-185
with over 185 projects

$84.95

NEW!

PRICE GUARANTEE MATCH



Snap Circuits® SOUND®, the newest addition to the Snap Circuits® line up. Learn all about sound and how it is made and heard. Build more the 185 projects to help demonstrate the principles of sound. APPS for Snap Circuits® SOUND® are available.

Ages 8 & up

ELENCO® SNAP CIRCUITS®

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

Snap Circuits® Green Alternative Energy Kit

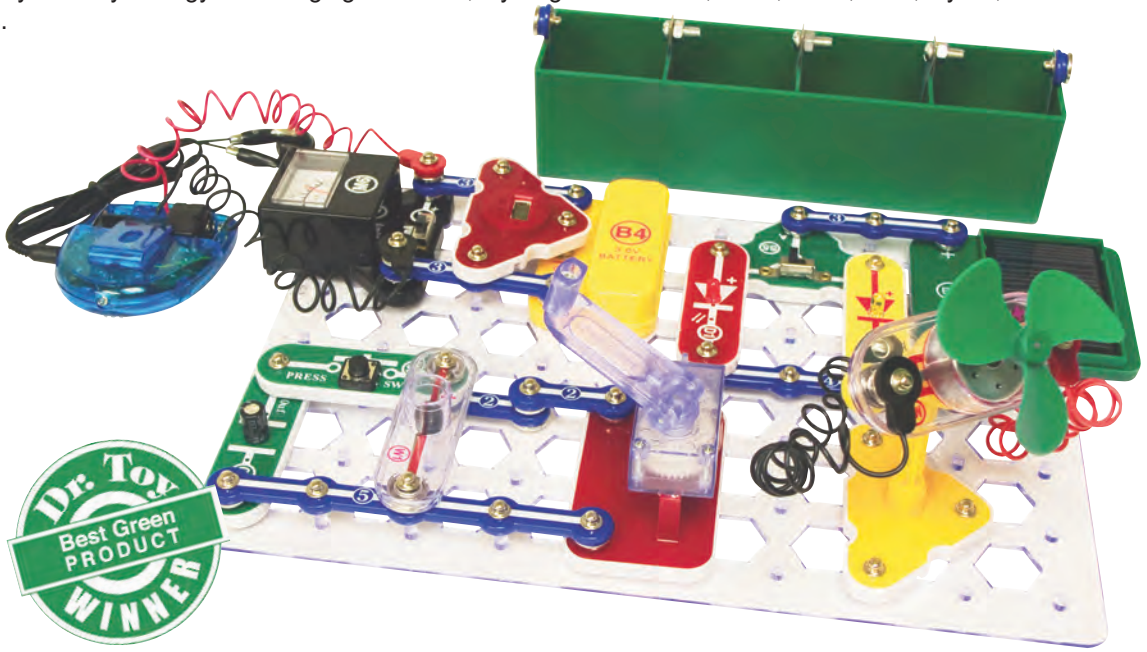
$79.95

PRICE GUARANTEE MATCH

Model SCG-125

with over 125 projects

Learn about energy sources and how to "think green". Build over 125 projects, using the flexibility of our award-winning Snap Circuits®, to have loads of fun learning about environmentally friendly energy and how the electricity in their home works. Includes full-color manual with over 100 pages and separate educational manual. This educational manual will explain all the forms of environmentally friendly energy including: geothermal, hydrogen fuel cells, wind, solar, tidal, hydro, and others. Contains over 40 parts.



Topics Covered:

- Solar Energy
- Wind Power
- Hydro Power
- Generators
- Chemical Power
- Rechargeable Batteries
- Analog Meters

Ages 8 & up

ELENCO® SNAPTRICITY®

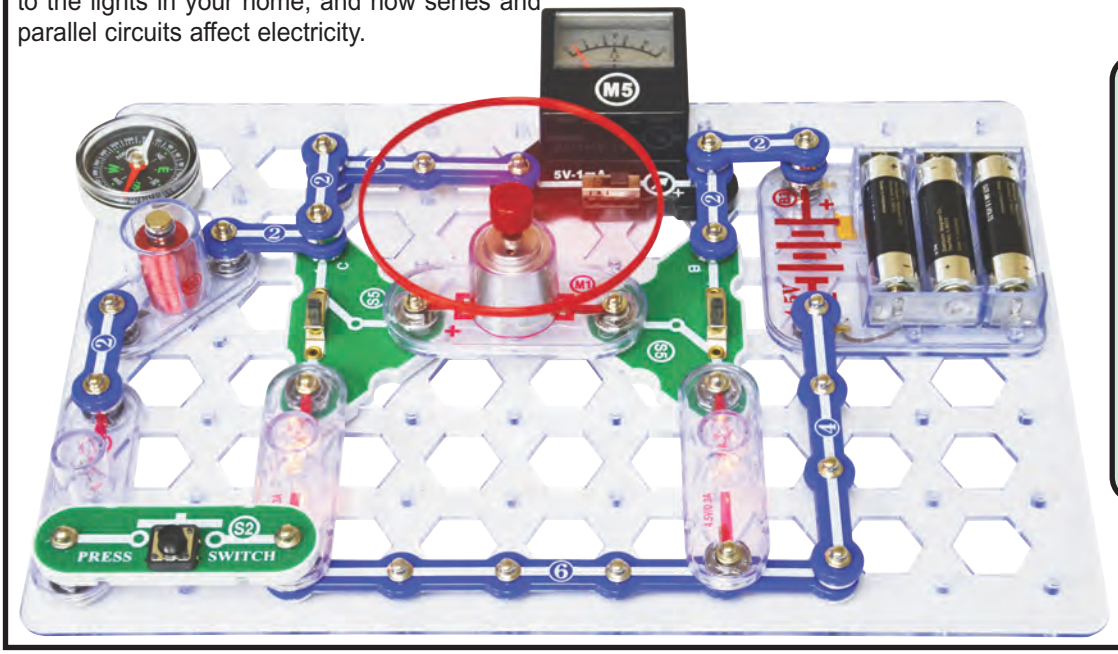
Model SCBE-75

with over 75 projects

PRICE GUARANTEE MATCH

$42.95

Learn how **electricity** and **magnetism** can be used to make each other. Learn about magnetic fields, how the electricity in your home works, how switches control the electricity to the lights in your home, and how series and parallel circuits affect electricity.



Features:

- Over 40 parts
- Includes: Meter, electromagnet, motor, lamps, switches, fan, compass, and electrodes
- Educational toy: Projects that relate to electricity in the home and magnetism and how it is used.

Requires three (3) "AA" batteries or AC adapter (see page 9).

ELENCO® SNAP CIRCUITS® EDUCATIONAL KITS

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

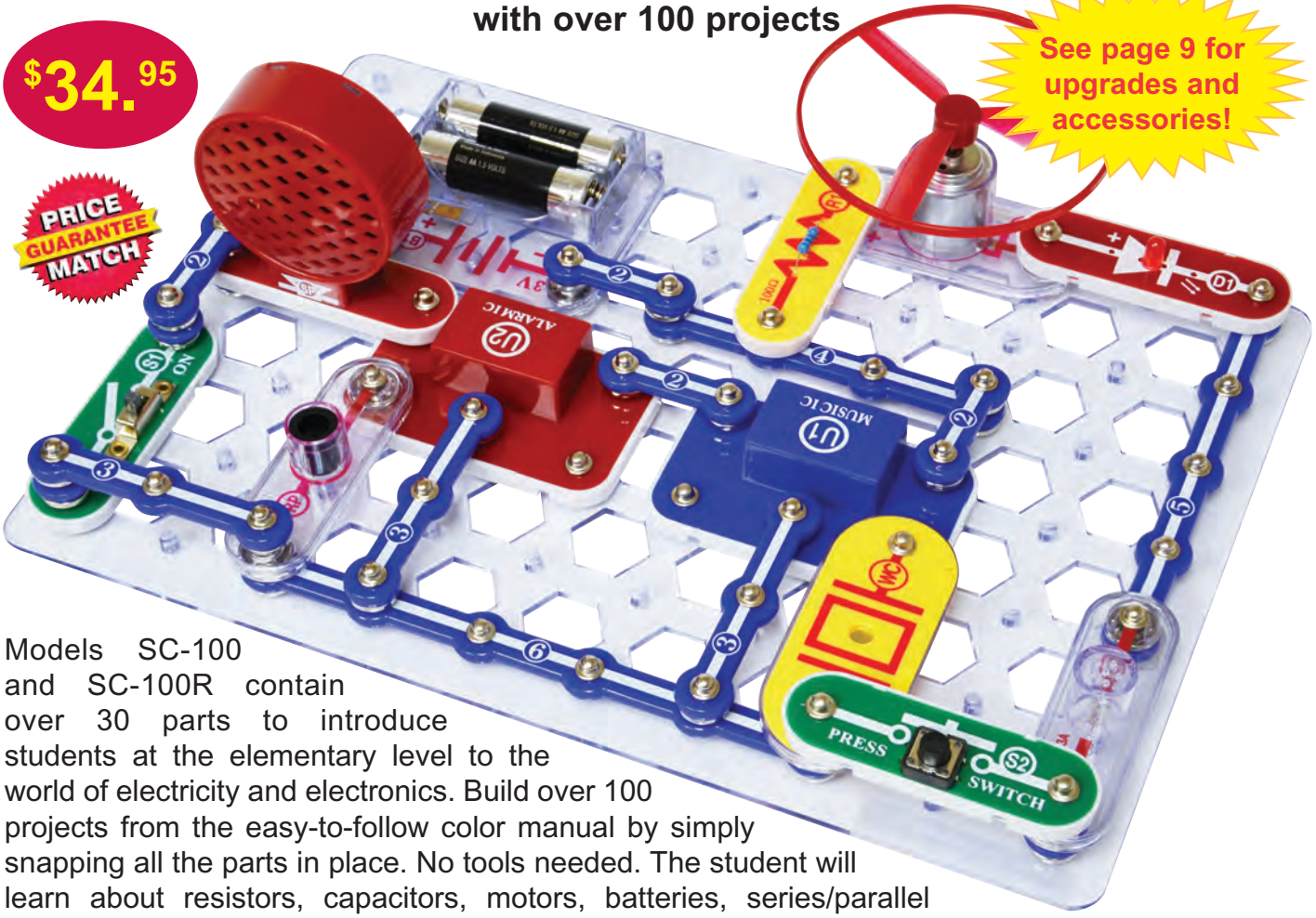
Snap Circuits® Jr. Model SC-100

with over 100 projects

$34.95

PRICE GUARANTEE MATCH

See page 9 for upgrades and accessories!



Models SC-100 and SC-100R contain over 30 parts to introduce students at the elementary level to the world of electricity and electronics. Build over 100 projects from the easy-to-follow color manual by simply snapping all the parts in place. No tools needed. The student will learn about resistors, capacitors, motors, batteries, series/parallel circuits, and much more.

Build over 100 projects

Including:

- Flying Saucer
- Spin Draw
- Sound Activated Switch
- Alarm Circuit

Contains Over 30 Parts

Including:

- Photoresistor
- Music IC
- Motor
- Space War IC

Training Program

Model SC-100R

(Same as SC-100 PLUS Case, Student & Teacher Guides, see page 9)

$54.95

PRICE GUARANTEE MATCH

This popular educational version is the same as the SC-100 with the addition of a 48-page, color enhanced learning guide.

Storage Case

Each SC-100R comes with a lightweight, durable case to store all Snap Circuits® parts.

Case included

All models on this page require two (2) "AA" batteries, or an AC adapter - see page 9

ELENCO® SNAP CIRCUITS® EDUCATIONAL SERIES

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

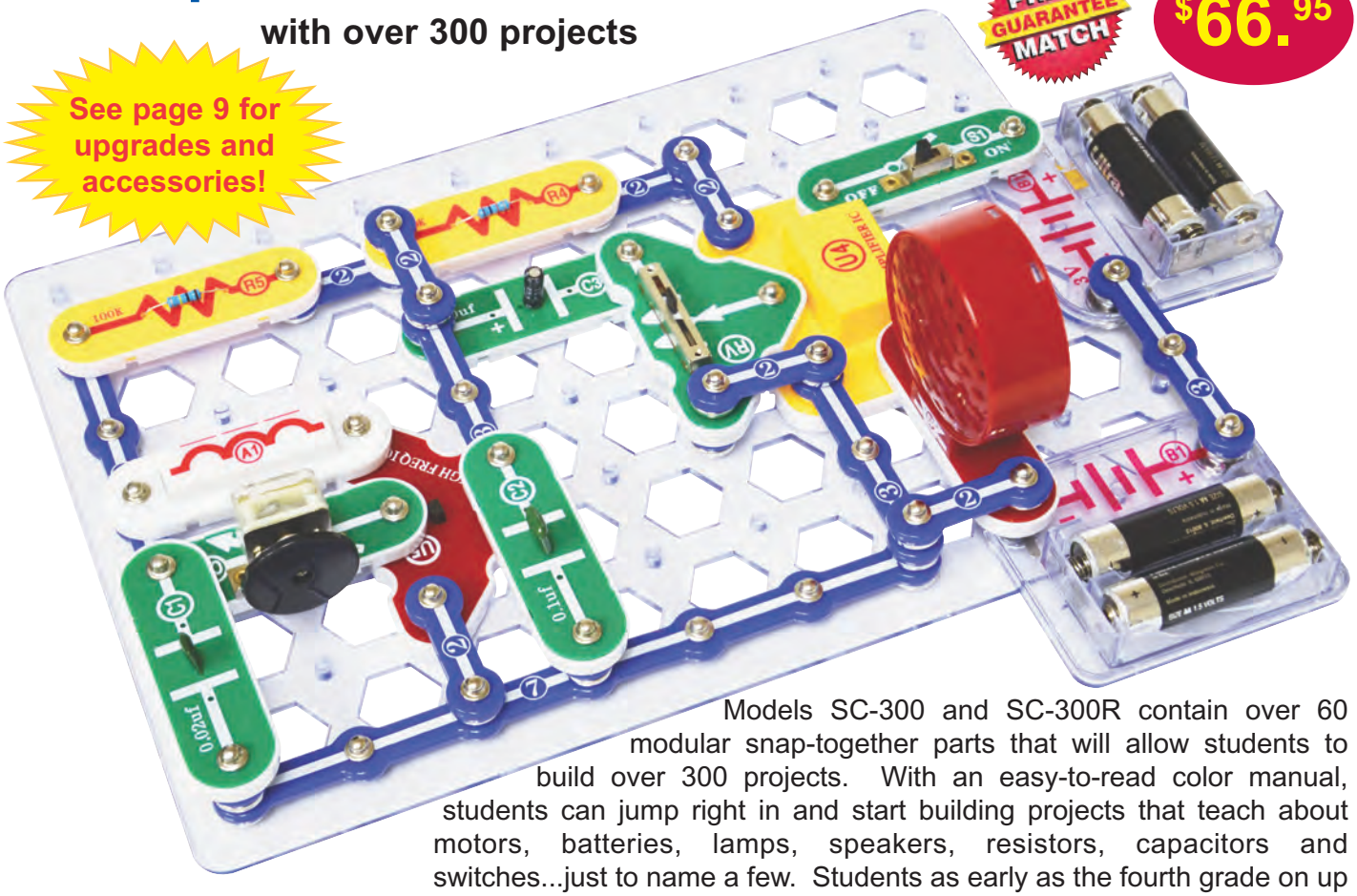
Snap Circuits® Model SC-300

with over 300 projects

PRICE GUARANTEE MATCH

$66.95

See page 9 for upgrades and accessories!



Models SC-300 and SC-300R contain over 60 modular snap-together parts that will allow students to build over 300 projects. With an easy-to-read color manual, students can jump right in and start building projects that teach about motors, batteries, lamps, speakers, resistors, capacitors and switches...just to name a few. Students as early as the fourth grade on up to high school will enjoy learning and have fun working with Snap Circuits®.

Build over 300 projects

Including:

- AM Radio
- Water Detector
- Motion Detector
- Electronic Kazoo
- Burglar Alarm
- Lie Detector
- Plus all projects contained in the 100-in-1 (SC-100)!

Contains Over 60 Parts

Including:

- Antenna Coil
- Microphone
- Power Amplifier IC
- Variable Capacitor
- Five Fixed-value Capacitors
- High Frequency IC
- Two Transistors
- Adjustable Resistor

SC-300S - Deluxe Version, same as SC-300 plus 41 bonus, computer interfaced projects. Includes CI-73.

$86.95

PRICE GUARANTEE MATCH

Training Program Model SC-300R

(Same as SC-300 PLUS Case, Student & Teacher guides, see page 9)

A value of over $140!

only

$119.95

PRICE GUARANTEE MATCH

The SC-300 Student Guide for the SC-300R includes 80 pages of educational curriculum. Written with the help of educators, the Student Guide is essential in covering all topics related to electricity and electronics being taught in middle schools and above. Includes real world applications and problem solving quizzes.

Custom Storage Case

Each SC-300R comes with a lightweight, durable case with custom foam inserts to store all Snap Circuits parts. Easy-to-identify missing components.

All models on this page require four (4) "AA" batteries, or an AC adapter - see page 9.

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

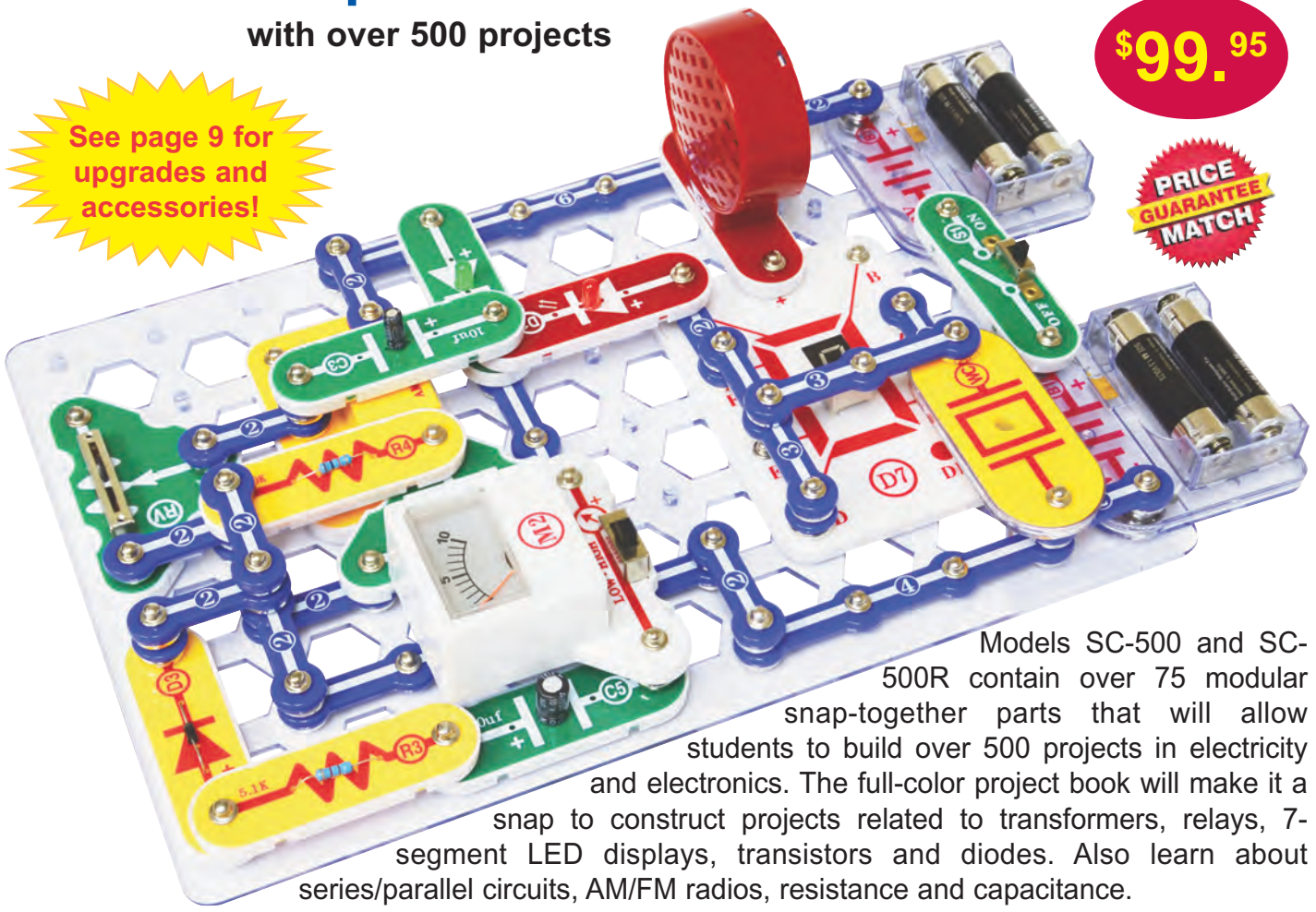
Snap Circuits® Pro Model SC-500

with over 500 projects

$99.95

PRICE GUARANTEE MATCH

See page 9 for upgrades and accessories!



Models SC-500 and SC-500R contain over 75 modular snap-together parts that will allow students to build over 500 projects in electricity and electronics. The full-color project book will make it a snap to construct projects related to transformers, relays, 7-segment LED displays, transistors and diodes. Also learn about series/parallel circuits, AM/FM radios, resistance and capacitance.

Build over 500 projects

Including:

- Digitally-Tuned FM Radio
- Adjustable Light Control
- Digital Voice Recorder
- Light Controlled Music
- AC Generator
- Flashing Numbers
- Music Meter
- Electronic Cat
- Plus all projects contained in the 300-in-1 (SC-300)!

Contains Over 75 Parts

Including:

- FM Radio Module
- Analog Meter
- Recording IC Module
- 7-Segment LED Display
- Diode
- Relay
- SCR
- Transformer

SC-500S - Deluxe Version, same as SC-500 plus 73 bonus,computer interfaced projects. Includes CI-73.

PRICE GUARANTEE MATCH

$119.95

Training Program Model SC-500R

(Same as SC-500 PLUS Case & Student & Teacher Guides, see page 9)

Over 100 educational pages to enhance the learning!

A value of over $190!

only

$159.95

PRICE GUARANTEE MATCH

Custom Storage Case

Each SC-500R comes with a lightweight, durable case with custom foam inserts to store all Snap Circuits® parts. Easy to identify missing components.

All models on this page require four (4) "AA" batteries, or an AC adapter - see page 9.

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

Snap Circuits® Extreme

Model SC-750

with over 750 projects

$139.95

PRICE GUARANTEE MATCH

See page 9 for upgrades and accessories!

Models SC-750 and SC-750R contain over 80 parts to build over 750 projects. Includes everything from SC-500 plus projects in solar, electromagnetism, vibration switches, and over 70 computer interfaced projects.

Build over 750 projects

Including:

- Strobe Light
- Electromagnetism
- Transistor AM Radio
- Rechargeable Battery
- Mega Pulser and Flasher
- Plus all projects contained in the 500-in-1 (SC-500)!

Contains Over 80 Parts

Including:

- Solar Cell (6SCB2)
- Electromagnet (6SCM3+B)
- Vibration Switch (6SCS4)
- Two-spring Socket (6SCPY1)
- CI-73 Downloadable Software and Interface cable

Training Program

Model SC-750R

(Same as SC-750 PLUS Case & Student & Teacher Guides, see page 9)

The SC-750R includes student guides with over 140 full-color educational pages to enhance the learning.

A value of over $220!

only

$199.95

PRICE GUARANTEE MATCH

Custom Storage Case

Each SC-750R comes with a lightweight, durable case with custom foam inserts to store all Snap Circuits® parts. Easy to identify missing components.

All models on this page require four (4) "AA" batteries, or an AC adapter - see page 9.

Ages 8 & up

IDEAL FOR HOME SCHOOLING - SNAP CIRCUITS® UPGRADES

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

PRICE GUARANTEE MATCH

Upgrade Kits Available

Get the additional parts and manuals to take your Snap Circuits® set to the next level!

UC-30 Upgrade Kit — $34.95

Converts SC-100 Snap Circuits® Jr. into SC-300 Snap Circuits®

includes 30 new parts (AM radio components, transistors, ICs, capacitors, resistors, & more) to build an additional 200 projects!

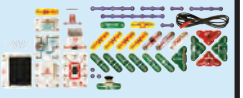
UC-40 Upgrade Kit — $69.95

Converts SC-100 Snap Circuits® Jr. into SC-500 SnapCircuits® Pro

includes 42 new parts, AM/FM radio, recorder, meter & more to build an additional 400 projects!

UC-60 Upgrade Kit — $99.95

Converts SC-100 Snap Circuits® Jr. into SC-750 Snap Circuits® Extreme



includes 49 new parts, including CI-73 computer interface, solar panel, to build more than 650 additional projects!

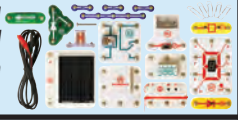
UC-50 Upgrade Kit — $34.95

Converts SC-300 Snap Circuits® into SC-500 Snap Circuits® Pro

includes 12 new parts (recording IC, transformer, FM radio, meter, & more) and 200 projects!

UC-70 Upgrade Kit — $69.95

Converts SC-300 Snap Circuits® into SC-750 Snap Circuits® Extreme



includes 19 new parts, including CI-73 computer interface,and solar panel to build more than 450 additional projects!

UC-80 Upgrade Kit — $39.95

Converts SC-500 Snap Circuits® Pro into SC-750 Snap Circuits® Extreme

includes 7 new parts, including CI-73 computer interface, and solar panel to build more than 250 additional projects.

Snap Circuits® Battery Eliminator

Model AC-SNAP

Works on all models of Snap Circuits®.

$19.95

Custom Storage Case

Model SNAPCASE7

Heavy duty plastic case with 2 custom foam inserts for housing your Snap Circuits® parts. Makes it easy to identify missing components and includes a separate small case to hold the smaller loose parts as well.

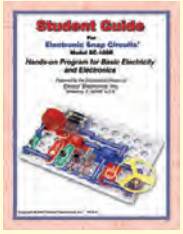
$59.95

Teaching Aids for the Homeschooler – Student Guides

Educational Series - Teaches about Basic Electricity & Electronics in the everyday world using our Learn By Doing® concept!

Junior Student Guide

Model 753294

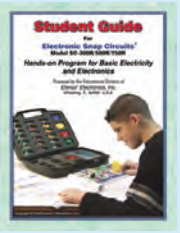


48 full-color pages *(Covers experiments 1-101)*

$9.95

Extreme Student Guide

Model 753307



Enhance your learning with detailed explanations and quizzes. 137 full-color pages covering all 750 Snap Circuits® projects! Ideal for ALL Snap Circuits® mode. One book covers them all!

$24.95

Teacher Guide

Model 753290

The Teacher Guide is meant to prepare educators for proper troduction of Snap Circuits® and guide them through each chapter with quizzes for the students to test their knowledge.

$5.95

Ages 8 & up ELENCO® MINI SNAP CIRCUITS®

PRICE GUARANTEE MATCH

NEW! Flying Saucer Plus

Model SCP-09 — $19.95

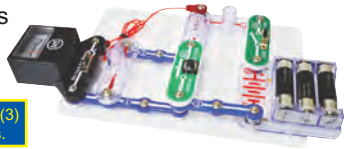
- Press and release the switch and watch the saucer rise into the air!
- 14 projects

Requires three (3) "AA" batteries.

NEW! Basic Electricity

Model SCP-10 — $19.95

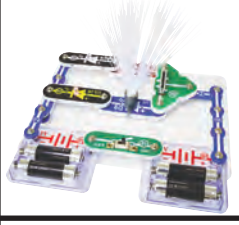
- Learn about basic electricity principles while having fun!
- 9 projects



Requires three (3) "AA" batteries.

NEW! LED Fun

Model SCP-11 — $19.95

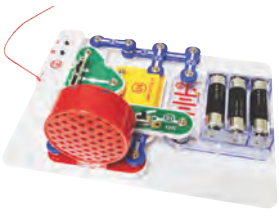


- Create your own colorful light show!
- 11 projects

Requires four (4) "AA" batteries.

NEW! FM Radio

Model SCP-12 — $24.95



- Build an FM radio that really works!
- 4 projects

Requires three (3) "AA" batteries.

NEW! Motion Detector

Model SCP-13 — $24.95

- When motion is detected, a laser sound is emitted and the color LED flashes.
- 12 projects

Requires three (3) "AA" batteries.

NEW! Strobe Light & Sound

Model SCP-14 — $24.95

- Adjustable-speed strobe light with sound effects.
- 14 projects

Requires three (3) "AA" batteries.

Ages 8 & up

ELENCO® DELUXE SNAP ROVER®
RADIO CONTROLLED VEHICLE

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

Model SCROV-50

$119.95

PRICE GUARANTEE MATCH

Introducing the next generation of the RC Snap Rover®! This version includes a disc shooter, digital voice recorder, and music sounds. Over 50 parts allow you to complete over 60 projects.

Features

- Disc shooter
- Digital voice recorder
- Music sounds
- Over 60 projects
- Over 50 parts
- Left & right turning control
- Goes forward & backward
- Headlight for use in the dark!
- Red & blue side lights
- Wireless remote control
- Run up to three Rovers at once
- No soldering required

Requires one (1) 9V and six (6) "AA" batteries.

(forward, back, left & right)

ELENCO® SNAP ROVER® - RADIO CONTROLLED VEHICLE

Model SCROV-10

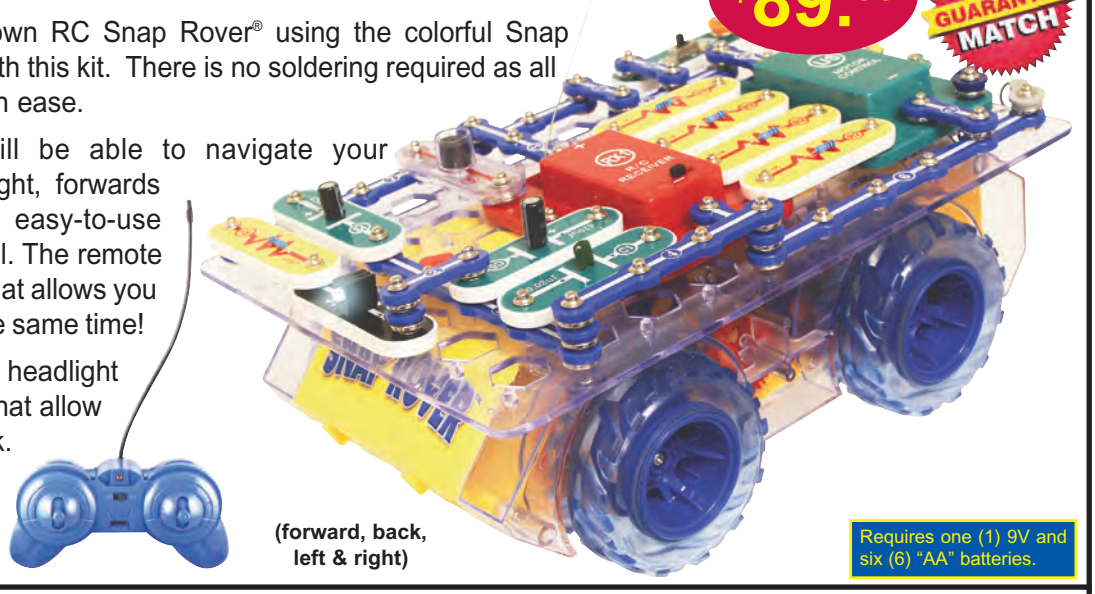
$89.95

PRICE GUARANTEE MATCH

Have FUN building your own RC Snap Rover® using the colorful Snap Circuits® parts that come with this kit. There is no soldering required as all the parts snap together with ease.

Once completed, you will be able to navigate your surroundings going left, right, forwards and backwards with the easy-to-use Snap Rover® remote control. The remote is a 27MHz multi-channel that allows you to run up to three cars at the same time!

Snap Rover® includes a headlight and red & blue side lights that allow you to operate it in the dark. Build over 20 projects. Includes over 30 parts.



(forward, back, left & right)

Requires one (1) 9V and six (6) "AA" batteries.

Deluxe Snap Rover® Upgrade Kit

Model UC-90

Upgrade your Snap Rover® to a Deluxe Snap Rover®! Includes the disc launcher, parts, and manual for over 40 new projects.

Includes foam discs!

$45.95

PRICE GUARANTEE MATCH

Ages 8 & up

ELENCO® LIGHT-SOUND COMBO

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

Model SCC-350

with over 350 projects

PRICE GUARANTEE MATCH

$149.95

A value of over $200!

Requires four (4) "AA" batteries.

Including:

- Color Light
- Light Show
- Color Oscillator
- Triple Blinker
- R/C Blink & Beep
- PNP Amplifier
- Light & Sound
- Electronic Keyboard
- Voice Changer with Echo
- Audio Amplifier
- Clicker
- Water Alarm

Contains Over 60 Parts

Including:

- Infrared detector
- Strobe light
- Color changing LED
- Glow-in-the-dark fan
- Strobe integrated circuit (IC)
- Fiber optic communication
- Color organ controlled by iPod or other MP3 player, voice, and fingers
- Pre-punched patterns for motor
- Keyboard with optical theremin
- Echo effects
- Voice changer: record voice or music and play it back at different speeds
- Sound energy demonstration
- Connect to your smart phone and analyze sounds with apps

Ages 12 & up

ELENCO® SNAP-MICRO™ I

$119.95

PRICE GUARANTEE MATCH

Model SCM-400

with over 25 projects

Snap-Micro™ I is an easy way to learn about micro-controllers and how they are used in the world around us. Our easy-to-follow instructions will guide you through the programming of basic commands by using flow charts to operate the micro-controller. After a brief intro, Snap-Micro™ I will have you programming over 25 projects such as data loggers, A/D converters, DC motors and much more using Snap Circuits® components. No prior understanding of micro-controllers required.

Snap-Micro™ I comes with all the components and software you need to get started. All that is required is a computer with Windows®-based system. The 86 page instruction manual is divided into 4 sections: Getting Started (electronic components), Flow Chart Programming and Snap Circuits® Basics, Programming for Snap Circuits®, and Audacity®* Sound Circuits. After the course is completed, you will have a better understanding of programming a micro-controller and how you can use them for real world applications.

86 page manual included

Learn About:

- Micro-controllers
- Flow charts
- Basic commands
- Electronic components
- Programming
- Data logging
- Sensors
- Analog to digital conversion
- Custom interface cable (included) plugs into the USB port on your computer.

UC-100 Upgrade Kit

This upgrade kit converts SC-300, SC-500, or SC-750 SnapCircuits® into SCM-400 Snap-Micro™ I

$74.95

* Audacity® is a registered trademark of Dominic M. Mazzoni, South Pasadena CA 91030

ELENCO® ELECTRONIC PROJECT LABS

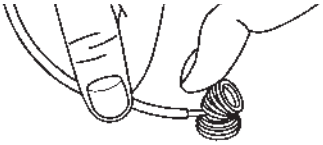
The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

NO TOOLS OR SOLDERING REQUIRED!

These "Electronic Science Labs" will teach you about electronics from A-Z. With these all-in-one labs, you'll learn about electronic parts, how to read schematics, and wiring diagrams. All this while building up to **500** different projects. These kits use two quick and easy hook-up methods:

Spring Method:

Simply slip pre-cut wires and components into special springs for a safe, secure connection.



Electronic Playground

Model EP-50

Over 50 Electronic Projects

Ages 10 & up

Build these exciting circuits:
- Finger touch lamp
- Magnetic bridge
- Voltmeter
- Morse code
- Alarm
- Electronic noisemaker
- Electronic kazoo
- Electronic keyboard
- AM Transistor radio
- Radio announcer
- Metal detector

Learn about:
- Voltage
- Current
- Resistors
- Capacitors
- Transistors
- Diodes
- Transformers
- Speakers
- Antennas

$24.95

Ideal for Middle Schools!

OVER 50 EXPERIMENTS

Specifically Designed for Beginners.

Requires one (1) 9V battery.

Uses spring hook-up method

$54.95

Ages 10 & up

Uses spring hook-up method

75-IN-ONE Electronic Project Lab

Model MX-905

- Easy-to-read, illustrated, lab-style manual included.
- Learn basic principles of electricity, electronics, physics and magnetism!

Requires four (4) "AA" batteries.

Everything You Need to Build:

• Timer Buzzer	• Electronic Organ	• Sound-sensor Timer
• Sound Alarm	• Motion Detector	• Four-level Photometer
• Burglar Alarm	• First-Aid Siren	• Two Stage Timer Sound
• Photo-level Alarm	• Pulse Width Modulation	• Voltage Detector
• Logic Tester	• Water Level Alarm	• Conductivity Tester
• Electronic Coin Toss	• Sound Level Meter	• Optical Volume
• Motion LED	• DC to DC Converter	• AND MANY, MANY MORE!

130-IN-ONE Electronic Playground

Model EP-130

- Easy-to-read, illustrated, lab-style manual included.
- Learn basic principles of electricity, electronics, physics and magnetism!
- Comes with built-in speaker, 7-segment LED display, two fully integrated circuits and rotary controls.

Everything You Need to Build:
- AM Broadcast Station
- Electronic Organ
- Strobe Lights
- Timer
- Logic Circuits
- AND MUCH MORE

$49.95

Requires six (6) "AA" batteries.

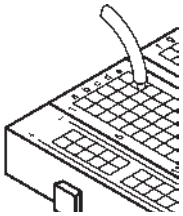
Ages 10 & up

Uses spring hook-up method

ELENCO® ELECTRONIC PROJECT LABS

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

Breadboard Method:
Featured in our advanced kits, this system is used by professionals and engineers. Just plug the components and wires into the special breadboard socket holes.



No soldering is required. Everything uses safe battery power - no dangerous AC is required, so it's safe for all ages. Labs come with all components and wires needed to build each project. NO TOOLS ARE REQUIRED. Easy-to-read, illustrated, lab-style manuals take you through each electronic experiment step-by-step. All are designed for ages 10 & up, so these are ideal for **MIDDLE SCHOOLS** and **HIGH SCHOOLS**.

500-IN-ONE Electronic Project Lab

Model MX-909

Features

- Everything you need to build 500 Exciting Electronic Projects.
- Learn the basics of electronics and put your knowledge to work creating 500 different electronic experiments, special lighting effects, radio transmitter and receivers, amazing electronic sound effects, cool games and MORE!
- Includes built-in breadboard for easy wiring and connection of components, and an LCD (Liquid Crystal Display) indicates the information during the experiments in process!
- Build your knowledge by exploring amplifiers, analog and digital circuits plus how to read schematic diagrams.
- Includes transistors, transformer, diodes, resistors, capacitors, phototransistor, CdS, integrated circuits, speaker, earphone, LEDs, LED digit display!
- Fact-filled, illustrated, lab-style manual included.

$299

Requires six (6) "AA" batteries.

Uses breadboard and spring hook-up methods

Ages 12 & up

300-IN-ONE Electronic Project Lab

Model MX-908

Ages 12 & up

$129

Everything You Need to Build 300 Exciting Electronic Projects:

- A transistor radio
- IC (integrated circuit) organ
- Burglar alarm
- Delayed timer
- Electronic game
- Optical volume
- Multiplier
- Multiple counter
- Digital light dimmer
- Tone burst generator
- Audio signal tracer
- Electronic candle
- Voice level meter
- Metal detector
- Rain detector
- Voltage drop alarm
- Logic checker
- Function generator
- Voltage controlled amplifier
- AND MANY, MANY MORE!

Uses spring and breadboard hook-up methods

Easy-to-read, illustrated, lab-style manual included.

Requires six (6) "AA" batteries.

200-IN-ONE Electronic Project Lab

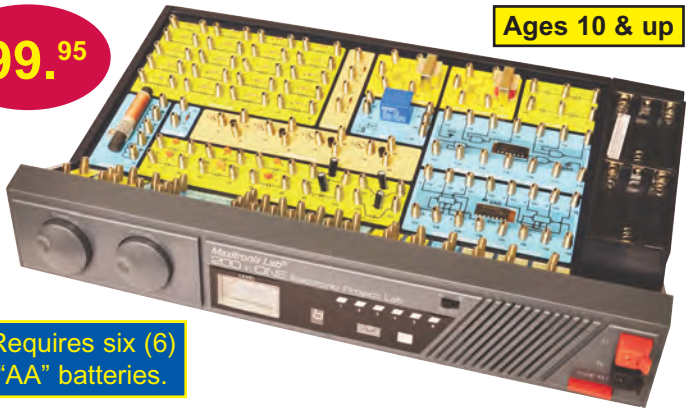
Model MX-907

$99.95

Ages 10 & up

Features

- Easy-to-read, illustrated, lab-style manual included.
- Learn about transistors, transformers, diodes, capacitors, oscillators, basic electronic circuits, and schematic symbols.
- Build your own Radio, AM Broadcast Station, Burglar Alarm, Electronic Game, Ohmmeter, Telegraph, Rain Detector, Amazing Sound Effects, and Much More!
- With built-in speaker, earphone, meter, seven-segment LED digital display, out-front controls, and more!



Requires six (6) "AA" batteries.

Uses spring hook-up method

Ages 8 & up

ELENCO® NON-SOLDERING RADIO KITS

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

Electronic Short Wave Radio Kit

Model MX-901SW

$21.95

Requires one (1) 9V battery.

Features

- Learn while building your own short wave radio kit - it's easy, it's fun, and it's safe!
- Explore the fascinating world of short wave radio!
- Receives band from 6 - 8MHz (SW1) and 12 - 18MHz (SW2).
- Easy-to-read illustrated operating manual included.
- Safe, solderless, exciting, educational, and fun!

Electronic AM/FM Radio Kit

Model MX-901AF

$21.95

Features

- Learn while building your own AM/FM radio kit - it's easy, it's fun, and it's safe!
- Tune in your favorite AM/FM radio stations - receives 520 - 1650kHz band and 88 - 108MHz band.
- Easy-to-read illustrated operating manual included.
- Safe, solderless, exciting, educational, and fun!

Requires one (1) 9V battery.

Electronic FM Radio Kit

Model MX-901F

$17.95

Features

- Learn while building your own FM radio kit - it's easy, it's fun, and it's safe!
- Tune in your favorite FM radio stations - receives 88 - 108MHz band.
- Easy-to-read illustrated operating manual included.
- Safe, solderless, exciting, educational, and fun!

Requires one (1) 9V battery.

Electronic AM Radio Kit

Model MX-901A

$16.95

Features

- Learn while building your own AM radio kit - it's easy, it's fun, and it's safe!
- Tune in your favorite AM radio stations - receives 520 - 1650kHz band.
- Easy-to-read illustrated operating manual included.
- Safe, solderless, exciting, educational, and fun!

Requires one (1) 9V battery.

Electronic Crystal Radio Kit

Model MX-901C

Features

- Safe, solderless, educational, and fun!
- Easy-to-read instructions included.
- Crystal diode converts RF to audio.
- Tune in your favorite AM radio stations!
- Learn how radios work.
- Includes earphone.
- For ages 10 and up.

$14.95

No batteries required!

4-in-1 Action Kit Lab Model MX-902

Electronic Motor Action Kit
Model MX-510M

Requires two (2) "AA" batteries.

$13.95 ea.

Generator Action Kit
Model MX-510G

$13.95 ea.

Get these 4 kits for the price of 3!

All 4 only $41.95

Electronic Bell Action Kit
Model MX-510B

Requires two (2) "AA" batteries.

$13.95 ea.

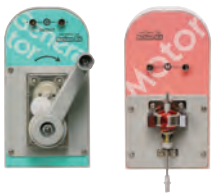
Electronic Meter Action Kit
Model MX-902ME
Included with MX-902

Requires two (2) "AA" batteries.

OR both together

Electronic Motor & Generator Action Kits

(save $3 on a 2-pack)
Model MX-902T



Requires two (2) "AA" batteries.

$24.95

Just a Few of the Many Exciting Experiments Included in the MX-902

- Controlling motor's forward/reverse rotation with generator.
- Fan using motor and generator.
- Electromagnet and reverse polarity.
- Operating the electric bell with generator.
- Color mixing with rotating color disc.

Features

- Safe, solderless, educational, and fun!
- Easy-to-read, illustrated, lab-style manual included.
- Discover how an electric bell is constructed and how it's made to ring.
- Build your own operating motor - it's easy, it's fun, it's safe!
- Find out how a generator makes the electricity that makes things work.
- Meter measures the amount of electricity used in your experiments.
- For ages 10 and up.

Ages 8 & up

JR. SCIENTIST SERIES

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

These kits contain all the materials you need to conduct experiments. The educational science guide included contains an experiment kit to enable you to quickly begin experimenting and helps you to thoroughly understand fundamental principles. Experience things that you cannot get from a school science textbook!

NEW!

Mini Electric Guitar
Model EDU-62104

$54.95

Grab this sweet mini 4-string electric guitar before they are gone! Features a built in amp and speaker so you can rock on the go and a standard 1/4" jack to plug in to a real amp and really get loud! Easy to assemble, fun to play!

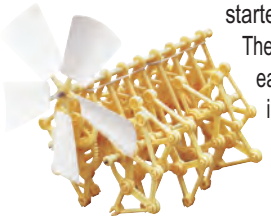
Requires two (2) "AA" batteries.

NEW!

Strandbeest
Model EDU-62221

$34.95

Build this Strandbeest kit yourself! It has a very interesting mechanism: blowing into the fan makes the animal start walking against the wind. The wind power is conveyed to the legs by 2 gears. The 28-page science guide gives you the history of the real Strandbeest that Theo Jansen started building in 1990. The guide also includes easy-to-follow assembly instructions.



NEW!

Rhinoceros Kit
Model EDU-62222

$34.95

This Mini Rhinoceros has excellent connections between crank shaft and every part enabling each leg to move smoothly. Blowing into the fan makes the animal start walking against the wind. The wind power is conveyed to the legs by 3 gears. The 24-page science guide gives you the history of the real Giant Beest that Theo Jansen started building in 1990. The guide also includes easy-to-follow assembly instructions.

Tumbling Robot
Model EDU-62019

$32.95

This little robot is tough! Run by a single motor, he walks with a decidedly "angry" pace -- and if he falls over, he picks himself up again! An awesome design with an amazing gear mechanism, he will not quit! Over 50,000 sold in Japan and a big hit at the International Robot Exhibition. Easy to build

Requires two (2) "AA" batteries.

Sound Control UFO
Model EDU-62022

$32.95

Navigated by a sound-sensitive remote control system, you can have hours of fun with this little guy. Measures 4.5" tall and 4.5" diameter, and weighs 8 oz. Simple assembly is required. No remote control needed!

Requires three (3) "AAA" batteries.

Insect Catcher w/ Ants' Nest Case
Model EDU-62003

$24.95

This kit is used to collect and observe ants and other small insects. It lets you clearly see how ants build their colonies.

Requires two (2) "AA" batteries.

Brine Shrimp Aquarium
Model EDU-62005

$24.95

This kit allows you to grow and observe Artemia Salina (also known as Brine Shrimp) with ease. With the water lens in the water tank, magnifying glass, and observation plate, you can observe the progress of the growth of brine shrimp. Science guide included (68 color pages).

Tyrannosaurus Rex Skeleton
Model EDU-62008

$24.95

Tyrannosaurus 1/35 Skeleton Model & Dinosaur Tooth, Trilobite, Ammonite Fossil Replica Creation Kit. This is a model based on the latest research on the Tyrannosaurus that lived in the Cretaceous period. By assembling and observing it you can research the ecology and evolution of dinosaurs.

Crystal Making Experiment Set
Model EDU-62010

$24.95

This enables you use pointed crystal base to create beautiful acicular (needle-shaped) crystals used to make crystal mobiles and crystalline figures. By using gemstone crystal base (alum), you can conduct an experiment making octahedral crystals. Science guide included (68 color pages).

Ages 9 & up

Engino® MEGA STRUCTURES

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

ENGINO® TOY SYSTEM is very unique in its ability to create complex builds even by using a small number of different parts. The versatile design of the components allows connectivity in all directions of the 3D space, while the patented extendable rods enable triangulations at any angle. The MEGA STRUCTURES series demonstrates this ability of Engino® to build huge models of impressive size and style.

London Eye
Model ENG-MS3

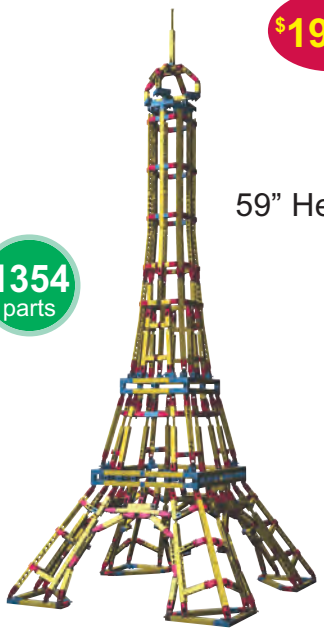
$299.95

1718 parts

35” Height

Eiffel Tower
Model ENG-MS1

$199.95



1354 parts

59” Height

Ferris Wheel
Model ENG-MS2

$159.95

890 parts

23” Height

Ages 8 & up

Engino® solar power™ SERIES

Global warming and Climate change has brought to our attention the need to save the planet by reducing Carbon emissions, the gasses released from the burning of fossil fuels and petrol. Our sun can provide free energy for all our needs; however, we need to convert it to a useful form. One of the most modern technologies harness solar power is the use of photovoltaic, especially when solar energy needs to be converted to electricity. The new Engino® solar power sets use photovoltaic panels to drive the various models and also have hybrid functions, in-line with the latest technological trends.

Solar-Powered Pro Duo
Model ENG-S30

$119.95

307 parts

20 Models

The solar pro duo set is the ultimate solar set, including two solar panels of 1.5V each, which may be connected in series for increased power. The panels can be connected directly to the motor or they can connect to the RC handset, powering up the models effectively even from a distance!

Solar-Powered Cars
Model ENG-S20

$94.95

282 parts

8 Models

Young inventors can now experiment with this technology using this hybrid Engino set. Engino® models can run either with solar energy or with battery power!
Includes a 20-page booklet with building instructions for 8 models.

Solar-Powered Machines
Model ENG-S10

$74.95

290 parts

8 Models

This set includes a 1.5V solar panel which drives a variety of models demon-strating the many different applications of solar power. The set includes a 20-page booklet with building instructions for 8 models.

Ages 6 & up

MECHANICAL SERIES

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

All contain a 36-page activity book with innovative experiments and detailed explanations of the different technological principles applied! Booklet with detailed building instructions also included.

8-in-1 Simple Machines Set

Model ENG-M10

192 parts

$99.95

This set is the combination set of the basic 8 sets of the mechanical science series. It covers all simple machines: the lever, the wedge, the wheel and axle, the screw, the inclined plane, and the pulley, as well as two more mechanisms, the gear and the linkage. Build 60 working models, including cars, cranes, and all different types of machines. A 70-page activity book is included.

Forces, Energy, and Motion

Model ENG-M11

114 parts

$59.95

NEW!

Learn all about Newton's Laws and Energy conservation. The set features 5 fully working models, a dragster powered by anelastic spring, a crash test car, a catapult, a gravity operated fan and a balon-powered flying plane! A 36-page activity book is included with innovative experiments and detailed explanations of the different technological principles applied!

Structures & Bridges

Model ENG-M09

190 parts

$54.95

Learn all about structures and how they literally support our lives! Discover the different types of bridges and forces and build 7 working models including a house, a suspension bridge, a cable-stayed bridge, an arch bridge, and two different truss bridges! A 36 page activity book and a booklet with detailed building instructions are included.

Screws

Model ENG-M08

150 parts

Learn how worm gears are used to greatly lower rotational speed and how screws can convert circular to linear motion while greatly increasing force. Build 5 working models, a screw press, a folding lifting platform, 2 cranes and a vise.

Gears

Model ENG-M07

150 parts

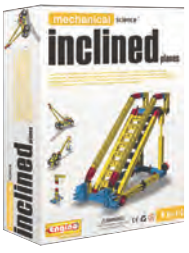
Learn how gears can easily reduce or increase speed, change Force, or transfer motion from one position to another. Build 6 working models, a gearbox, a hand drill, an egg beater, a helicopter, a rotating sign post and a high speed fan.

$47.95 Each This Row

Inclined

Model ENG-M04

132 parts



Learn how an Inclined Plane can be used to lift heavy objects and how is used in every day applications. Build 5 models including a splitting wedge, an automatic ramp with a car, an airport staircase and a car with crane.

Wheels

Model ENG-M03

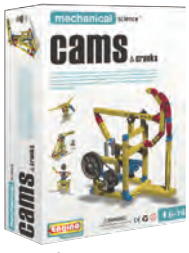
132 parts

Learn how wheels use friction to move objects easily and how turning wheels can help move around corners. Also how big wheels compare to small wheels. Build 5 models including a tractor, a motorcycle, a door, a car with steering wheels and a car lift.

Cams

Model ENG-M06

104 parts

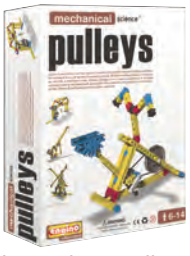


Learn how you can transmit power using Cams and Cranks are how these can be used to convert reciprocal to linear motion. Build 5 models including an oil drill, a flying eagle, a crane and a moving figure.

Pulleys

Model ENG-M05

104 parts



Learn how pulleys can be used to transfer force with reduced friction and how to increase force or speed at amazing levels. Build 5 working models including an oil drill, a stationary bike, cranes, bridges and a machine blender.

$39.95 Each This Row

Linkages

Model ENG-M02

96 parts

Learn how such links can be applied on various machines and build 6 working models including a mechanical extendable arm, a lifting platform, a pantograph, a moving figures toy, a folding ladder and a parallel weighting scale.

Levers

Model ENG-M01

96 parts

Learn how Levers are used to increase force and lift heavy objects and how the use of levers can change the direction of motion. Build 6 working models including a parking gate, a see-saw, 2 types of weighting scales and a wheelbarrow.

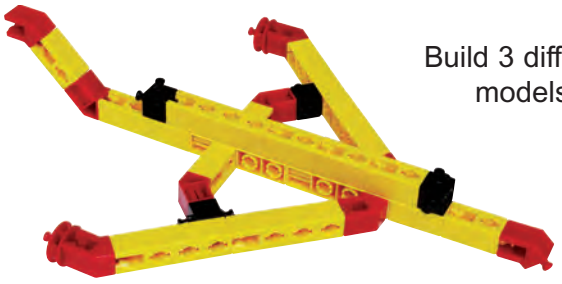
The inventor basic series has been developed for maximizing creativity and imagination. In each set many different models can be created from a wide range of themes, from structures to cars, planes and cranes! The bigger sets also include the 3V geared motor, allowing children to motorize many of their models. Detailed instructions are included for the major models while secondary models can be assembled by following the free to download internet instructions. All sets can be combined together to create bigger builds, limited only by the child's imagination.

3 Models Set

Model ENG-0320

$9.95

32 parts



Build 3 different models.

8 Models Set

Model ENG-0820

$19.95

90 parts

Build 8 different models.

10 Models Set

Model ENG-1020

89 parts

Build 10 different models.

$24.95

12 Models Set

Model ENG-1220

81 parts

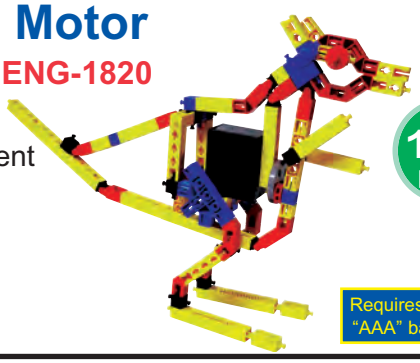
Build 12 different models.

$29.95

18 Models Set with Motor

Model ENG-1820

Build 18 different models.



104 parts

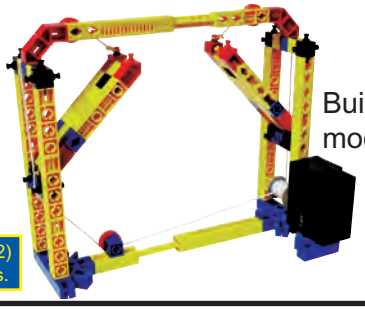
$44.95

Requires two (2) "AAA" batteries.

20 Models Set with Motor

Model ENG-2020

110 parts



Build 20 different models.

$54.95

Requires two (2) "AAA" batteries.

25 Models Set with Motor

Model ENG-2520

Build 25 different models.

110 parts

$59.95

Requires two (2) "AAA" batteries.

30 Models Set with Motor

Model ENG-3020

Build 30 different models.

193 parts

$79.95

Requires two (2) "AAA" batteries.

Ages 7 & up

Engino®

inVentor basic™ SERIES

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

The multi-model capability of ENGINO® TOY SYSTEM is proportional to the number of parts contained in the sets. The inventor pro series is the ultimate range more suitable for intermediate and advanced users who literally "play to invent"! The models created with these sets are bigger and more elaborate and can move with the new compact dual output motor. The motor is powered from a wired remote control, specially designed to also work with solar. The series starts with the 40 models set and goes all the way to the 100 models set which has 2 motors and extra gears for even more complex builds. Each set contains printed instructions for selected 10 models while the rest can be downloaded free from Engino's website.

40 Models Set with Motor

Model ENG-4020

Build 40 different models.

$79.95

175 parts

60 Models Set with Motor

Model ENG-6020

Build 60 different models.

$99.95

238 parts

80 Models Set with Motor

Model ENG-8020

Build 80 different models.

$114.95

277 parts

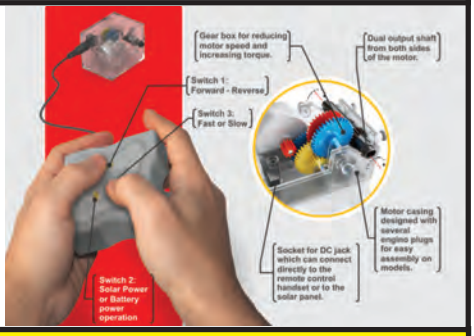
100 Models Set with 2 RC Motors and Gears

Model ENG-10020

Build 100 different models.

$149.95

498 parts



Ages 5 & up

Engino® ecobuilds™ NEW!

The first innovation of ENGINO® was the wood connectors, arange of plastic components which allowed wooden dowels of 3/8" x 3/8" to connect together without any glue or fasteners. This hybrid system forms the basis of the new Eco builds series which includes 4 starter sets and 2 advanced sets. The biggest set also includes the geared ENGINO® motor for animated models. The use of wood reduces significantly the plastic parts and leads to more efficient recycling, making this product an environmentally friendly solution.

ECO-Motorized Racers

Model ENG-EB70

$79.95

One of two advanced sets, Build 3 different motorized models.

177 parts

ECO-Offroaders

Model ENG-EB60

$54.95

One of two advanced sets, Build 3 different models.

162 parts

ECO-Cars

Model ENG-EB10

83 parts

Build 3 different models.

ECO-Motorbikes

Model ENG-EB11

$29.95 Each in this row

92 parts

Build 3 different models.

ECO-Planes

Model ENG-EB12

119 parts

Build 3 different models.

ECO-Helicopters

Model ENG-EB13

119 parts

Build 3 different models.

Ages 8 & up

LEONARDO DA VINCI KITS

Snap-together assembly required

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

The scientific genius of Leonardo da Vinci is brought to life through these 15 articulated models. The inventions that inspired these snap-together replicas are taken from the pages of da Vinci's priceless and awe-inspiring notebooks. All models are made of plastic and require no special tools. Da Vinci Manuals are very educational and teach how these inventions have evolved into what they are today. **No batteries required!**

Mechanical Drum

Model EDU-61001

$19.95

Leonardo da Vinci's Mechanical Drum is a cart equipped with an amply sized drum. When pulled by its handle, the gears turn the two lateral drums, which are fitted with pegs. The pegs move a total of ten drumsticks that cause them to beat the large drum.

Aerial Screw

Model EDU-61002

$19.95

The Aerial Screw designed by Leonardo da Vinci was a precursor of the modern day helicopter. The device was designed to compress air in order to obtain flight.

Swing Bridge

Model EDU-61003

$19.95

Leonardo da Vinci's Swing Bridge design is a portable, lightweight bridge that was intended to span across a body of water so armies could cross and then quickly disassemble and tow away. By means of an articulated system of winches and wheels, the bridge was designed to rotate 90 degrees.

Printing Press

Model EDU-61004

$19.95

Leonardo da Vinci studied the Guttenberg printing press and finely-tuned it for greater efficiency. In his design , da Vinci used a handpress with an automatic system that moved the type-saddle forward and back along a tilted surface.

Multi-barreled Cannon

Model EDU-61005

$19.95

Attempting to increase the firepower of a traditional cannon, Leonardo da Vinci designed the 12-barreled gun carriage in the fifteenth century. This cannon, which was designed to rest on a rolling cart, had a wider target area and also had the advantage of being able to be loaded at the same time it was firing.

Armored Car

Model EDU-61006

$19.95

Leonardo da Vinci's armored car was the precursor to the modern-day tank. Da Vinci's design was capable of multi-directional movement and was equipped with cannons that were arranged in a 360-degree firing range around its circumference.

Paddleboat

Model EDU-61007

$19.95

Leonardo da Vinci's time, nautical expedition was the most expedient method of communicating with the world. Da Vinci brought forth plans for a boat with large wheel-shaped paddles that would propel it through water.

Propelled Cart

Model EDU-61008

$19.95

Leonardo da Vinci designed the first self-propelled cart capable of moving without being pushed or pulled manually. The precursor to the automobile was one of the many inventions that da Vinci created dealing with locomotion and transportation.

Ages 8 & up

LEONARDO DA VINCI KITS

Snap-together assembly required

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Catapult
Model EDU-61009

Leonardo da Vinci improved upon the already-established catapult design when he introduced his own vision the age-old military launching device. The plans for the new catapult employed a hand crank that caused tension on the throw arm before releasing a projectile.

$19.95

Bombard
Model EDU-61010

To make the bombard or cannon more effective, Leonardo da Vinci designed projectiles that contained a quantity of mini gunpowder shots packed into petal-shaped iron pieces that formed a ball. After assembly, the cannonball was loaded into the barrel of the bombard and fired.

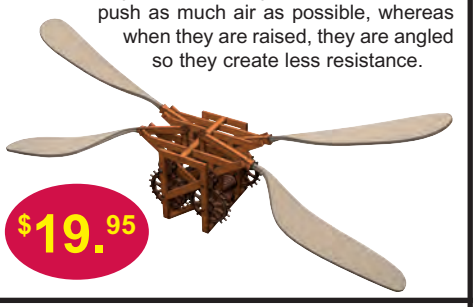
$19.95

Mechanical Butterfly
Model EDU-61018

Leonardo da Vinci himself advised where one can admire these incredible flying insects: To see four-winged flying, look near ditches and you will see dragonflies.

It is extremely difficult to create a mechanical replica of the natural movement of an animal. The beating of the dragonfly's four wings is particularly complex and Da Vinci was well aware of how difficult it would be to create this machine; he himself described it in great detail. It is not simply wings beating up and down; it's a jointed motion.

Whilst beating down, the wings are "flat" in order to push as much air as possible, whereas when they are raised, they are angled so they create less resistance.



$19.95

Submarine
Model EDU-61020

$19.95

A boat with sails has a part that is submerged in the water and invisible to enemies. The pilot used a passage to get into the lower part undercover: the Mechanical Submarine. A pulley and rope system lowers the submarine, which can unhook itself underwater and proceed invisibly towards the enemy. The submarine has two air chambers, which can be used for steering and for air needed by the pilot, who has a mouthpiece. Steering underwater is done by means of a mechanical system.

Great Kite
Model EDU-61021

$19.95

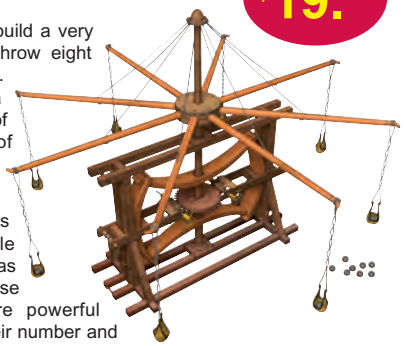
The genius Da Vinci drew inspiration for his work from his direct observation of the flight of a bird. Da Vinci described its dimensions, the materials with which it is to be built, and its shape and how it works; the whole notebook revolves precisely around the construction and use of the machine.

Da Vinci also imparted some "flying lessons" on how the pilot should operate the machine. The piloting must have been complex. He would use his hands and feet to activate ropes and could rotate, move and open and close the wings with his own movements.

Multiple Sling
Model EDU-61022

$19.95

Leonardo da Vinci's idea was to build a very powerful machine, which could throw eight large projectiles at the same time. He positioned eight long arms in a circle around a central pin, each of which had a sling capable of throwing a projectile attached to it.



This kind of project, where weapons were developed to hurl multiple projectiles to be more powerful, was common in Da Vinci's time, because doing this meant creating more powerful weapons, simply by increasing their number and power, without the need to develop new building techniques and using familiar materials. They were therefore potentially attractive weapons because they were powerful, but they were also relatively inexpensive.

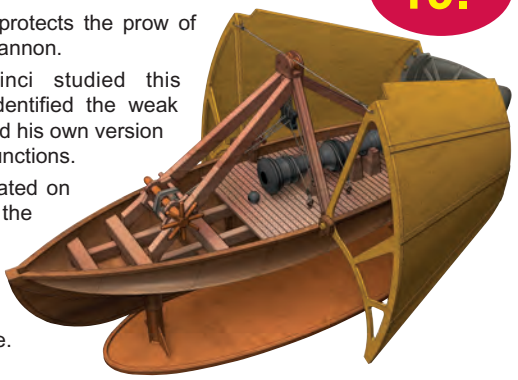
Ship's Cannon with Shield
Model EDU-61023

$19.95

A wooden shield protects the prow of the ship and the cannon.

Leonardo da Vinci studied this subject closely, identified the weak points and invented his own version with many more functions.

First, he concentrated on the structure of the vessel, which needed to be reinforced and keep the cannon firmly in the middle.



Adventures in Fiber Optics
Model FO-25
$54.95

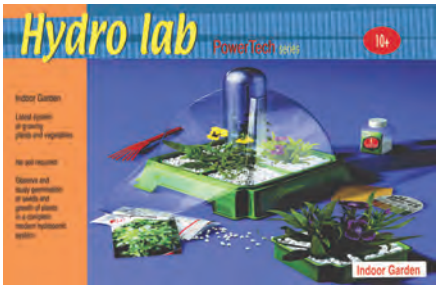
Have an adventure in Fiber Optics! Have FUN doing exciting fiber optic projects like these: Image Magnifier, Lighted Constellation Map, Fiber Optic Wand or a Fluorescent Holiday Wreath, and many more projects. This kit contains 20 different experiments plus five unique projects. Each activity contains step-by-step instructions and explanation of the results, plus historical facts or scientific trivia on fiber optics. A great product to educate as well as entertain.

Ages 12 & up

Requires two (2) "AA" batteries.

Hydrolab
Model EDU-8740
$49.95

Complete greenhouse system for cultivating plants and vegetables in an "indoor" environment, without soil, using a modern Hydroponics system. The kit comes with a base, adjustable translucent observation cover, four growing trays, fertilizer tank, safe chemicals and bedding for propagating the growth of plants.



Ages 10 & up

Solar Power
Model EDU-8405
$45.95

150 Challenging Experiments. Convert solar energy. Build a solar electric generator, motor, water heater, furnace, thermometer, crane and solar energy mobiles.

Unique experiments with color optics, electro-plating, stroboscopes, thermodynamics and Moiré patterns.

Ages 10 & up

Solar Energy
Model EDU-3050
$12.95

All you need to build your own complete solar energy lab. Kit includes over 25 sunny and fun experiments. Learn about conservation of energy. Complete with solar energy collector and solar heater. Study light, optics and magnification.

Ages 8 & up

Weather
Model EDU-7074
$29.95

Over 30 fascinating activities all about weather and climate. Build your own barometer, weather vane, rain gauge, and hydrometer. Observe the weather traits and see how they'll affect tomorrow's weather. Make a rainbow, produce clouds, lightning, rain, and even a thunderstorm!

Ages 8 & up

Requires one (1) 9V battery.

Detectolab
Model EDU-7080
$29.95

Investigate, analyze, decipher and solve the crime! Over 65 activities with fingerprints, secret messages, chromatography, cipher codes, identity detection and more... Kit includes 30X microscope and necessary lab equipment.

Ages 8 & up

Requires two (2) "AA" batteries.

Electricity
Model EDU-2018
$15.95

Introduction to electricity and electrical circuits. Learn about series, parallel, and broken circuits, voltage, current, resistance, switches, wires, contacts, resistors, and light bulbs.

Ages 8 & up

Requires four (4) "AA" batteries.

Crystal Radio
Model EDU-3010
$15.95

Build your own working crystal radio. Look for and pick up radio stations. Earphone and antenna included.
No tools or batteries required. Remember the days of the first radio.

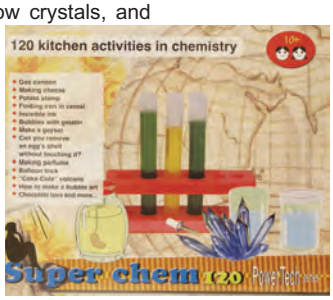
Ages 8 & up

Super Chem 120

Model EDU-8355

$39.95

120 activities with fun science and kitchen chemistry. Make giant soap bubbles and 3D soap bubble sculptures. Make monster dough, grow crystals, and create secret writing. Prepare your own fun, shaped soap, a volcano and a propelled motor boat. You will make yogurt, ice cream, cookies, gelatin figures and even cheese. Observe the way plants react to chemicals and light. A full-colored, simple-to-read instruction manual is included with this kit.



Ages 10 & up

Super Chem

Model EDU-8350

$35.95

100 kitchen activities in chemistry include balloon trick, gas cannon, making a geyser, cleaning old coins, cola volcano, removing an egg's shell without touching it, making soap bubble solution, making invisible ink, making cheese, potato stamp, finding iron in cereal, and many more!

Ages 8 & up

Physics

Model EDU-8200

$39.95

Have no fear of physics! 250 captivating experiments which will introduce you to this fascinating field! Experiment with electricity, magnetism, motors, gases, liquids, heat, sound, force, pressures and motion. Understand nature's basic laws.

Ages 10 & up

Requires two (2) "AA" batteries.

Chemistry 60

Model EDU-7075

$32.95

Beginning chemistry set includes 60 fun activities with no chemicals. Activities include three-dimensional bubbles, basic chemistry, crystal growing, physics, magnetism, optics, growing plants, slime & gook, science tricks, and chromatography.

Ages 10 & up

Warning: This product contains magnets.

Crystal Wonder

Model EDU-CM007

$34.95

A wonderful kit packed with exciting activities. Make crystals of all shapes, sizes and colors. The kit includes 12 different colored salts, a display stand and all the equipment needed to produce crystals. Other activities include making jewelry, creating a crystal garden and decorative crystal gifts.

Ages 10 & up

Volcano

Model EDU-CM011

$34.95

Get in touch with nature at its most powerful and awesome. Make an erupting volcano, complete with light and sound effects. Trace the development of volcanoes and produce different types of eruptions. Other activities include: how to make a fire extinguisher, a lava light, chocolate lava and much more.

Ages 10 & up

Requires two (2) "AA" batteries.

Paper Making Kit

Model EDU-7095

$25.95

Have fun recycling paper to create new paper of your own design. Choose colors, size, and decorations. Use your recycled paper to make a photo album, mobiles, containers, paper animals, and flowers. Make greeting cards, notepaper, envelopes and picture frames, and much more; just use your imagination! Detailed instructions of all these items included in manual.

Ages 10 & up

Water Clock

Model EDU-3070

$24.95

Make a clock that can work just on tap water! You will never need batteries again! Also works on a variety of household materials such as: cola, fruit juice and even ketchup! Try other materials and see how the clock never stops. This is the best timekeeper you will ever have.

Ages 8 & up

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

NEW!

Microscope & Telescope Set with Survival Kit
Model EDU-TM008

$99.95

TM008 Features:

40x Telescope:
- 16" (41cm) Body
- 20x 30x 40x Eyepiece
- Diagonal mirror
- 30mm Ø objective lens
- 10" (25cm) tripod

Survival Kit Includes:
- Foldable 5-in-1 design
- 3x Binoculars
- Compass
- Whistle
- Emergency signal
- Mirror

1200x Diecast Microscope Includes:
- 9" (23cm) Huygens'Eyepiece microscope with color filters
- Micro Hatchery®
- (10) Blank slides
- (24) Cover glasses
- (24) Blank labels
- (24) Statical slide covers
- (2) Prepared slides
- Petri dish with magnifier®
- (2) Collecting vials
- Needle
- Scalpel
- Spatula
- 2-in-1 45mm Ø Magnifier
- Carrying case included(28.3" x 15.9" x 6.7")

288x Astrolon™ Telescope w/ Aluminum Tripod
Model EDU-36944

$99.95

Features
- 6 x 25mm Finderscope
- 2.3x Barlow lens
- 50mm ø Objective lens
- Diagonal viewer and two (2) interchangeable eyepieces
- Space map
- 36" Adjustable aluminum tripod
- Includes carrying case

50mm ø Objective Lens | 6 x 25mm Finderscope | Diagonal Mirror

35x-50x 50mm Zoom Terrestrial Telescope
Model EDU-36685

$59.95

Features
- Huygens' zoom eyepiece
- 50mm ø Objective lens
- 25" Aluminum telescope body
- 18" Aluminum tripod

50mm ø Objective Lens | 25" (65cm) Telescope Tube | Huygens' Zoom Eyepiece

Galaxy Star Finder
Model EDU-37364

Features
- Star projector
- Rotational on/off switch
- Light on/off switch
- Instructional pointer

$46.95

Requires six (6) "AA" batteries

20x • 30x • 40x Mobile Telescope w/ Tripod
Model EDU-41005

$26.95

Features
- 20x/30x/40x Eyepiece
- Diagonal mirror
- 16" ABS body
- 30mm ø Objective lens
- 10" Tripod

30mm ø Objective Lens

Diagonal Mirror

20x • 30x • 40x Eyepieces

NEW!

Night'n Day Globe

Model EDU-37502

$195.95

The Night'n Day® Real Solar Time Rotating Globe is a clock and calendar that shows the time of day and date for any location on earth. It also demonstrates which parts of the earth are in day/night. As the globe turns, you can see where people on earth are experiencing sunrise, sunset and twilight times.

Features

- Assembly and set-up required
- 11" (28cm) globe.
- 17" (43.18cm) tall.
- AC adapter included
- Ages 14+

$59.95

11"Dual-Cartography Illuminated Globe

Model EDU-2837

Features

- Dual-cartogrphy design, This globe diplays the geograpical freatures of the world when the light is off, but when the light is on, it diplays the politcal map of the world
- Shows regions where different animals live.
- More than 250 pictures and each picture is accompanied with text for easy identification.
- Educational & fun for all ages!

11" Desktop Political Globe

Model EDU-36899

2-piece construction with a sturdy base.

$33.95

$54.95

Wildlife Globe

Model EDU-37149

Features

- When the globe illuminates in the dark, more creatures appear in the oceans.
- Shows regions where different animals live.
- More than 250 pictures and each picture is accompanied with text for easy identification.
- Educational & fun for all ages!

5" Desktop Political Globe

Model EDU-36920

2-piece construction with a sturdy base.

$14.95

METAL DETECTORS & OUTDOOR EXPLORATION

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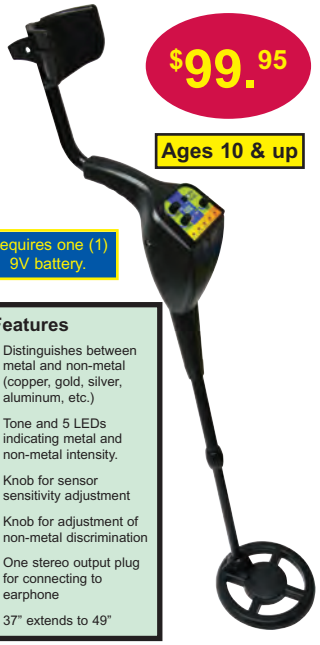
MultiSense Metal Detector
Model EDU-36966

$99.95

Ages 10 & up



Requires one (1) 9V battery.

Features
- Distinguishes between metal and non-metal (copper, gold, silver, aluminum, etc.)
- Tone and 5 LEDs indicating metal and non-metal intensity.
- Knob for sensor sensitivity adjustment
- Knob for adjustment of non-metal discrimination
- One stereo output plug for connecting to earphone
- 37" extends to 49"

Metal Detector with Beep
Model EDU-36749

Features
- Aluminum extension from 23" (58cm) to 38" (96cm)
- High-low sensitivity adjustment
- LED display
- Durable ABS body
- Low electrical consumption

$36.95

Ages 8 & up

Requires one (1) 9V battery.

Metal Detector (Security Wand) Kit
Model MX-700K (assembly required)

$25.95

- All-metal detection
- Visual target response - red LED flashes
- when a metal object is detected.
- Audio alert - high pitch sound.

Requires one (1) 9V battery.

Ranger Remote Controlled Metal Detector
Model EDU-37173

NEW!

Features
- 30 foot range
- Locate and find treasure
- High traction tires

Includes:
- RC metal detector and transmitter
- (2) Digging tools
- (4) Gold coin replicas

$79.95

Ages 8 & up

Requires one (1) 9V battery. and four (4) "AA" batteries

Rock Tumbler
Model EDU-36793

Ages 10 & up

$59.95

Shown with optional refill kit.

Rock Tumbler Includes:
- 4 oz. gemstone rocks
- (1) Step 1 coarse grinding powder
- (1) Step 2 fine grinding powder
- (1) Step 3 polishing powder
- (1) Step 4 fine polishing powder

Jewelry Making:
- 18" silver tone necklace chain
- (2) adjustable rings
- (1) key chains
- (1) pairs hanging earring wires
- (3) setting holders in 3 styles
- (1) jump ring connectors
- Glue

AC Adapter included
No Batteries Required!

Rock Tumbler Refill Kit
Model EDU-36925

$21.95

Rock Tumbler Refill Includes:
- Extra belt
- (2) 8oz. bags gemstone rocks
- (2) bags Step 1 coarse grinding powder
- (2) bags Step 2 fine grinding powder
- (2) bags Step 3 polishing powder
- (2) bags Step 4 fine polishing powder

Jewelry Making Includes:
- 18" silver tone necklace chain
- (4) adjustable rings
- (3) key chains
- (3) pairs hanging earring wires
- (12) setting holders in 2 styles
- (12) jump ring connectors
- Glue

Remote Controlled Black Widow
Model EDU-37526

Features
- Fully assembled
- Full-function: moves forward, left, right, stops, and turns in reverse.
- RC Black Widow performs simulated walking action with moving legs.
- Actual motion is achieved through hidden drive-wheels.
- Works indoors and outdoors on smooth surfaces with 25 foot (8 meter) range!

$54.95

Ages 8 & up

Requires one (1) 9V and four (4) "AA" batteries.

Water Filtration Kit
Model EDU-37677

NEW!

Water goes on quite a journey to reach our taps, safe and ready to drink. One of the many important steps in the process is filtration, which uses layers to sift containments out of the water. The kit here introduces how water gets cleaned by building a simple filtration system and more

Includes:
- 3x Gravel 80g
- 3x Sand 80g
- 3x Active Carbon 40g
- 5x 100mm filter paper
- 6x 45mm filter paper
- 1x 50ml Measuring cup

$29.95

Nature Science

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Ant World

Model EDU-BL073

$22.95

NEW!

Ants not included

Includes:
- Plastic ant housing
- Scene stickers
- Connectable magnifying box
- Tubing
- Feeding pipette
- Tunneling sand
- Illustrated instruction manual

Ages 5 & up

Worm World

Model EDU-BL075

NEW!

$22.95

Worms not included

Includes:
- Plastic worm housing
- Tunneling material
- Shade
- Illustrated instruction manual

Ages 5 & up

Insect Exploring Kit

Model EDU-BL131

$19.95

NEW!

Includes:
- Multi-level ant house
- Ant tunnel
- Ant platform
- 2-Way viewer Allows 2 people to view simultaneously
- Top view 4x magnification
- Easy grip handles
- Fully illustrated color instruction booklet

Ages 5 & up

Frog Dissection Kit

Model EDU-37307

$49.95

Includes:
- Authentically detailed frog body
- Removable texture organs
- Cross sections show muscle structure
- Glow-in-the-dark "X-ray" included
- Child safe lab tools included
- 12 removable parts

Ages 8 & up

Bug Collector Set

Model EDU-37310

$29.95

Features
- Bug collector can gently collect the little giants without hurting them.
- Observe and discover living insects and plants.
- Check and look around with bug collector, net, and tweezers for insects and plants.

Ages 5 & up

Periscope

Model EDU-37363

NEW!

$29.95

Features
- View objects over walls and around corners!
- Periscope extends from 21" to 29"
- Adjustable handles
- Spy View

Ages 8 & up

4x•6x Two Way Bug Viewer

Model EDU-36888

$9.95

Features
- Allows 2 people to view simultaneously.
- Ventilated bug viewer with base and easy-grip handles.
- 6x magnification (top view), 4x magnification (bottom view).
- Includes rubber spider.

Ages 5 & up

3x28mm Binoculars

Model EDU-BN328

NEW!

$4.95

Features
- 3x Magnification
- Rigid construction
- 3 Assorted colors: Yellow, Red, Blue

Ages 6 & up

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Do-It-Yourself (DIY) 3D Anatomy Kits w/ CD

3D Eyeball Kit
Model EDU-SK007

Assemble 3D eyeball model
Over 30 pieces

3D Heart Kit
Model EDU-SK009

Assemble 3D heart model
Over 30 pieces

3D Brain Kit
Model EDU-SK010

Assemble 3D brain model
Over 30 pieces

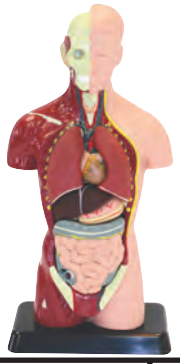
All three 3D anatomy kits come with a highly detailed finish and collectable quality. Display stand and CD included; CD contains interactive computer programs that explain the functions either the eyeball, heart, or brain, as well as games to help with understanding the functions. Computer programs compatible with Windows® or Macintosh operating systems.

11pc. 20" Human Anatomy Torso Model
Model EDU-41007

Features
- Hand painted in vivid and natural colors
- 11 Dissectible parts (EDU-41007) 8 Dissectible parts (EDU-41006)
- ABS base
- Fully illustrated color instruction manual
- Snaps together

$99.95

8pc. 10" Human Anatomy Torso Model
Model EDU-41006

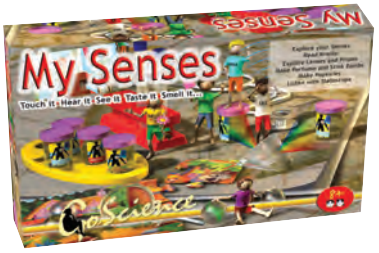


$39.95

My Senses
Model EDU-7086

$39.95

This kit is part of our Body Awareness Science Series, exploring the five senses: sight, hearing, smell, taste, and touch. Perform over 50 fascinating experiments. Use a genuine stethoscope, make a telescope with real lenses and create rain-bows with a prism. Prepare perfume and stink bombs with chemistry lab equipment. Learn how to read and send messages in Braille. Also includes many activities suitable for party games.



My Health Breathing Kit
Model EDU-7092

$29.95

Activities show how the lungs work. Explanation of how to check the volume of air intake into your own lungs. Includes a precision-made airflow meter that can check your own intake of air and check if you are within the normal age.

My Health Vision Kit
Model EDU-7094

$19.95

A simple explanation of how the eye works. Includes activities that demonstrate some of the eye's functions, a precision-made piece of optical eye testing equipment to test the eyes for normal sight, short-sightedness and long-sightedness, and eye testing charts.

ELENCO® SNAP-TOGETHER SKELETONS

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

T-Rex Skeleton
Model EDU-37329

$71.95

Imagine bringing a dinosaur back to life! Now you can, with the 36-inch EDU-TOY Tyrannosaurus Rex Skeleton. Unravel the mysteries of this majestic creature as you assemble the bones of this massive creature that roamed the earth 65 million years ago.

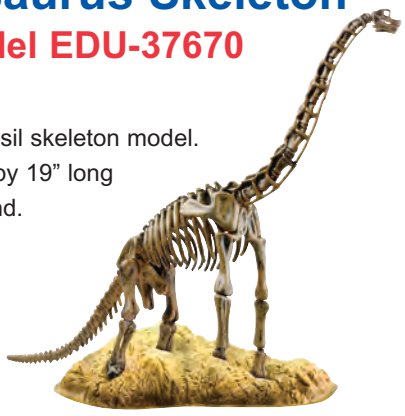
With the T-Rex model from C&S Sales, you create your own scale replica of this eight-ton tyrannosaurus that was nicknamed the “Tyrant Lizard King”. After snapping all 51 pieces together, you can begin to imagine the enormity of this 20-foot tall creature whose body spanned a full forty feet!

The T-Rex skeleton can be displayed or disassembled for later use.

Brachiosaurus Skeleton
Model EDU-37670

NEW!

- 23-piece realistic fossil skeleton model.
- Measures 13.5” tall by 19” long
- includes display stand.



$29.95

Velociraptor Skeleton
Model EDU-37671

NEW!

- 24-piece realistic fossil skeleton model.
- Measures 10.25” tall by 25” long
- includes display stand.

$29.95

PEG SCULPTURE HEADS

Introducing PegSculpture® Forensic Head Reconstruction Kits! Use simplified forensic facial reconstruction techniques. These great kits allow children to peg, build and sculpt the heads with supplied tools and modeling clay. Supplied with head pieces, numbered pegs, molded eyes, nose, and ears. A great head sculpture series for ages 8 and up with adult supervision.

Julius Caesar
Model EDU-557

$39.95

T-Rex
Model EDU-559

$39.95

Each Includes:

- Sturdy head stand
- Set of molded pegs and numbered to give flesh depth.
- Roller and sculpting tools.
- Full step-by-step DVD
- Skull with muscles and peg holes.
- Modeling clay is included.
- Molded eyeballs, ears and nose.
- Instruction manual

Queen Nefertiti
Model EDU-567

$29.95

Tutankhamun
Model EDU-568

$29.95

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

5-in-1 100x-1200x Deluxe Microscope

Model EDU-23703

Requires two (2) "AA" batteries

Includes:

- 11" microscope with micro viewer
- Microphoto projector and drawing device
- Micro Hatchery®
- Micro Slicer®
- (2) Prepared slides
- (10) Blank glass slides
- (12) Cover glasses
- (12) Statical slide covers
- (12) Blank labels
- (4) Collecting containers
- Petri dish with Magnifier
- Spare bulb
- (3) 10mL Graduated cylinders
- (2) Collecting vials
- Tweezers and needle
- Spatula, scalpel, dropper, stirring rod
- 3x / 6x Magnifier
- Scissors, condenser lens cap, and safety glasses
- Instruction manual

Ages 10 & up

$99.95

Digital Eye Scope

Model EDU-38002

Features

- Three-LED light source for specimen illumination
- Color CMOS Sensor resolution: 300k pixel (VGA)
- Fast preview frame-rate: 30fps
- Convenient-access snapshot button for image captures
- Easy to capture IMAGE & VIDEO on your PC or MAC!
- Free USB driver for Windows® XP/Vista, Mac OS 10.0.4.x USB 1.1, 2.0 or above
- Ground glass optical lenses

NEW! Low Price!

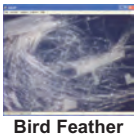
$39.95

Ages 8 & up

No Batteries Required!

Grasshopper Abdomen

Fish Scale



Bird Feather

Snake Scale

100x•300x•1000x 2-Way Microscope

Model EDU-41009

Includes:

- 12" 2-way microscope w/ viewer and projector
- Micro Hatchery®
- (6) Prepared slides
- (12) Blank glass slides
- (12) Cover glasses
- (12) Statical slide covers
- (12) Blank labels
- Vial of shrimp eggs
- Vial of shrimp chloride
- Vial of Eosin
- Vial of methylene blue
- Petri dish w/ Magnifier®
- (2) 10mL Graduated cylinders
- (4) Collecting vials
- Tweezers
- Needle
- Spatula

$59.95

Requires two (2) "AA" batteries

Ages 10 & up

100x-900x Zoom Microscope Set in Hand Carrying Case

Model EDU-41011

Includes:

- 9" Microscope w/ Huygens' eyepiece and color filters
- Micro Data Bank®
- Micro Slicer®
- (12) Blank slides
- (12) Cover glasses
- (12) Statical slide covers
- (12) Blank labels
- Petri dish w/ Magnifier
- (2) 10mLGraduated cylinders
- (4) Collecting vials
- Tweezers
- Needle and scalpel
- Stirring rod
- Condenser lens cap
- Spare bulb
- Instruction manual

$54.95

Requires two (2) "AA" batteries

Ages 10 & up

100x-900x Zoom Die-Cast Microscope Set w/ Light & Projector

Model EDU-41002

Includes:

- 9" Microscope w/ Huygens' eyepiece and color filters
- Micro Data Bank®
- Micro Slicer®
- (12) Blank glass slides
- (12) Cover glasses
- (12) Statistical slide covers
- (12) Blank labels
- Vial of eosin
- Vial of methylene blue
- (2) 10mL Graduated cylinders
- (2) Collecting vials
- Tweezers
- Needle
- Scalpel
- Stirring rod
- Condenser lens cap
- Safety goggles
- Spare bulb
- Instruction manual

Requires two (2) "AA" batteries.

$49.95

Ages 10 & up

100x-750x Zoom Microscope Set with Light & Projector
Model EDU-41001

$34.95

Includes:
- 9" Microscope w/ Huygens' eyepiece and color filters
- Micro Data Bank®
- Micro Slicer®
- (12) Blank slides
- (12) Statistical slide covers
- (12) Blank labels
- Petri dish w/ Magnifier
- (4) Collecting vials
- Stirring rod
- Condenser lens cap
- Spare bulb
- Instruction manual

Requires two (2) "AA" batteries

Ages 10 & up

100x • 300x • 600x Microscope Set with Light & Projector
Model EDU-41004

$23.95

Includes:
- 8" Microscope
- (2) Prepared slides
- Micro Slicer®
- (6) Blank slides
- (6) Statical slide covers
- (6) Blank labels
- (2) Collecting vials
- Tweezers
- Stirring rod
- 3x / 6x Magnifier
- Condenser lens cap
- Spare bulb
- Instruction manual

Ages 8 & up

Requires two (2) "AA" batteries

10x • 20x • 30x • 40x Mini Videoscope
Model EDU-36841

$19.95

Includes:
- 7" Videoscope
- (2) Prepared slides
- (6) Blank slides
- (6) Statical slide covers
- (6) Blank labels
- (2) Collecting vials
- Tweezers
- Spatula
- Stirring rod
- Spare bulb
- Instruction manual

Ages 8 & up

Requires two (2) "AA" batteries

100x • 200x • 300x Microscope Set
Model EDU-41003

$14.95

Includes:
- 6" Microscope
- Prepared slide
- (3) Blank slides
- (3) Statical covers
- (3) Blank labels
- 3x / 6x Magnifier
- Instruction manual

Ages 8 & up

No Batteries Required!

Handheld Microscope
Model EDU-37674

$11.95

NEW!

Includes:
- 4" Handheld Microscope
- Prepared slide
- Strap
- Stand
- 20x / 40x Magnifier

Ages 8 & up

Requires three (3) "LR44" batteries

12 pcs Prepared Micro-Slides + 6 Blank Slides
Model EDU-36730

NEW!

$21.95

Includes:
- (12) Slides with 36 assorted specimens (drinks, plastic, synthetic fibers, grasshopper, medicine & starch, micro-film, natural fibers, animal, algae, vitamin & fungi)
- (6) Blank slides

Ages 8 & up

Slide Making Kit
Model EDU-36700

$19.95

Includes:
- Micro Hatchery
- (2) Prepared slides
- (10) Blank slides
- (12) Cover glasses
- (12) Statical slide covers
- (12) Blank labels
- Vial of eosin
- Vial of shrimp eggs
- Vial of methylene blue
- Tweezers
- Dropper
- Stirring rod
- 3x / 6x Magnifier
- Safety goggles
- Vial of sodium chloride
- (2) 10mL Graduated cylinders
- (2) Collecting vials
- Instruction manual

Ages 10 & up

Prepared Micro-Slides
Model EDU-36729

$14.95

Includes: (12) Slides with 36 assorted specimens

Acrylic	Gills Mushroom	Laver Algae	Stem Toadstool
Aspirin	Glucose	Microfiche (3)	Tea
Bird Feather	Grasshopper	Nylon	Vitamin B2
Coffee	Abdomen	Penicillin	Vitamin C
Cola	Grasshopper	PM Foam	Vitamin D
Corn	Leg	Polyester	Wood Fungus
Cotton	Grasshopper	PS Foam	Wool
EVA Foam	Wing	Rice	
Fish Scale	Green Seaweed	Silk	
French Bean	Kelp	Snake Scale	

Ages 8 & up

OWIKIT ALTERNATIVE ENERGY ROBOT KITS

All require assembly, but no soldering

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

Salt Water Fuel Cell Monster Truck

$25.95

Model OWI-752

The Salt Water Fuel Cell Monster Truck Kit is fueled by salt water and is equipped with four-wheel drive mechanical construction. It easily handles different types of terrain by its twisted car body design. It has two transformable engine blocks: V-engine or flat engine. The transparent case design allows children to see the rhythm of the piston in vertical or horizontal position. Each monster wheel can change its angle individually and the truck can change its height and shape. Forward and reverse...no problem; simply switch the "positive and negative" connectors.

Salt Water Fuel Cell Motorcycle

NEW!

$24.95

Model OWI-753

Environmentally safe, non-toxic, and clean - The Salt Water Fuel Cell Motorcycle is the smallest, cheapest and the first motorcycle to be powered by saltwater. The Salt Water Fuel Cell Motorcycle gives children a chance to learn about new forms of clean energy, while building and powering their very own toy: Just add saltwater and go!

After activating the fuel cell module with a saltwater mixture, the magnesium metal sheet can operate the motorcycle for about 5-7 hours continuously. If you want to park the the vehicle, simply take out the fuel cell

Salt Water Fuel Cell Giant Arachnoid

$17.95

Model OWI-751

The Salt Water Fuel Cell Giant Arachnoid Kit gives children a chance to learn about new forms of clean energy, while building and powering their very own toy: Feed it saltwater and watch it scurry away!

Kids will be awed by the remarkable simplicity and outright creepiness its eight-legged movement produces. After activating the fuel cell module with a saltwater mixture, the magnesium metal sheet (3 sheets included) can operate the Spider for about 5-7 hours continuously. Because of these lifelike similarities, the user may want to stop this insectoid. It is easy; simply take out the fuel cell module, rinse with tap water, and dry.

Salt Water Fuel Cell Car

Model OWI-750

$17.95

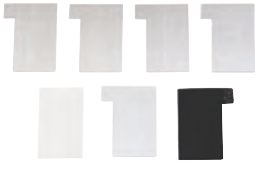
Environmentally safe, non-toxic and clean. The Salt Water Fuel Cell Car is the smallest, cheapest and the first car to be powered by saltwater. The Salt Water Fuel Cell Car gives children a chance to learn about new forms of clean energy, while building and powering their very own toy: Just add saltwater and go!

Kids will be awed by the remarkable simplicity and effectiveness of the toy. After activating the fuel cell module with a saltwater mixture, the magnesium metal sheet (3 sheets included) can operate the car for about 5-7 hours continuously. If you want to park the vehicle, simply take out the fuel cell module and rinse with tap water and dry.

Salt Water Fuel Cell Monster Truck Refill Pack

Model OWI-SP752

$7.95



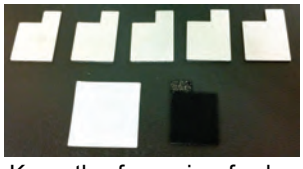
Keep the fun going for hours on end with this refueling pack for your Salt Water Fuel Cell Monster Truck. Included are 5 magnesium plates, 1 air cathode and 1 piece of nonwoven fabric that will keep your monster truck rumbling away.

*Note: This magnesium refill pack is specifically designed ONLY for the Salt Water Fuel Cell Monster Truck OWI752. (Shown above)

Fuel Cell Magnesium Spare Parts Pack

Model OWI-SP750

$5.95



Keep the fun going for hours on end with this refueling pack for your Salt Water Fuel Cell Robot Kits 750, 751, 753. Included are five (5) magnesium plates, one (1) air cathode and one (1) piece of nonwoven fabric that will keep your salt water car racing away.

Eco Biker (wind power)

Model OWI-630

$17.95

The Eco-Biker is your child's own personal wind turbine. Clip it to a bike's handlebars or anywhere with a breeze and watch as the fan powers an LED light

Ages 6-10 & up

ELENCO® SOLAR KITS

(All kits require assembly, but no soldering)

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

Ages 8 & up

Photon Solar Racer Kit

Model AK-590

$35.95

Learn all about solar energy and how to convert it to useful applications. You will build this exciting sleek solar car that runs on a high efficiency solar cell. Have your friends build one too and have fun racing them. No soldering required. The solar car comes in clear plastic. The car can be painted any color scheme that you desire (paint is not supplied).

Car in photo is painted to illustrate how your car could look.

Ages 8 & up

Deluxe Solar Educational Kit

Model SK-40

$22.95

Children can do a series of do-it-yourself experiments to acquire the basic knowledge of solar energy with this kit. They will learn how to make an electrical circuit, make a solar circuit, how to increase voltage and current, and how to use solar power to produce energy for a radio, calculator, battery charger, a cassette player and more!

NEW!

Solar F1

Model 21-667

$24.95

Construct a motorized DIY project using power from a solar cell or one "AA" battery(not included). Learn how motors and automotive transmissions work. Includes a solar cell, plastic body, gears, shafts, motor, and all necessary parts.

Ages 10 & up

NEW!

Astronaut Sun Power Kit

Model 21-665

$24.95

Construct a motorized DIY project using power from a solar cell or one "AA" battery(not included). Learn how motors and automotive transmissions work. Includes a solar cell, plastic body, gears, shafts, motor, and all necessary parts.

Ages 10 & up

Solar Can Motor Robot

Model EDU-37550

$21.95

Assemble a powerful solar "can" motor robot. See how the solar panel generates power! Includes solar panel, electric motor, body plate, robot arms, body rims, wheels, motor case, gears, wires, and instruction manual.

Ages 6 & up

Solar Bottle Motorboat

Model EDU-37551

$21.95

A simple kit designed for future engineers and environ-mentalists. Assemble a powerful solar bottle boat with used plastic bottles. See how the solar panel generates power!

Ages 6 & up

Solar Powered Butterfly

Model EDU-37534

$21.95

Includes a solar panel, electric motor, and all the other necessary parts to build your own solar powered butterfly. Stick it on a sunny window and watch the wings flap! Color manual included.

Ages 8 & up

Solar Powered Rainbow Reflector

Model EDU-37568

$21.95

Fill your room with rainbows every time the sun shines! Includes a solar panel, electric motor, and all the other necessary parts to build your own Rainbow Reflector kit. Color manual included.

Ages 8 & up

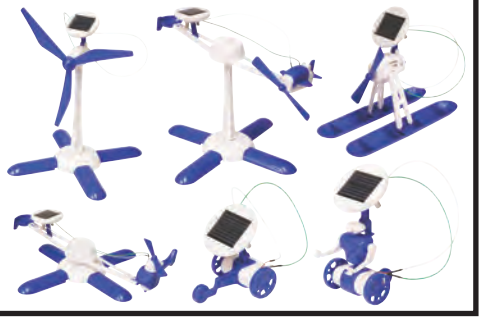
6-in-1 Solar Kit

Model EDU-38006

$19.95

Ages 8 & up

This do-it-yourself solar kit enables children to assemble the parts and transform them into six (6) different types of motor-driven apparatuses actuated by solar power! Apparatuses include Solar Windmill, Solar Airboat, Solar Helicopter, Solar Robot, Solar Airplane, and Solar Wheeler and stand up to 9" tall. This set includes 1 mini motor, 1 solar panel and 44 plastic parts that snap together.



Ages 9 & up

OWI KIT® MINI SOLAR KITS

No soldering required

No batteries required!

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

For the first time, experimenters with little or no experience at all. These handheld kits all move and demonstrate alternative energy principles. No batteries or special tools required for assembly. The included solar cell lasts up to two years! ALL the kits work best outdoors under direct sunlight, but some may work under a 100-watt light bulb or halogen bulb close up.

WALKING KING CRAB — OWI-MSK669

Methodically, eight legs work in harmony to create a ballet style "tippy-toe" movement. Similar to its cousin from Alaska, the sun's rays will make it scurry along to safe passage. If you were thinking about dipping its legs in melted butter and garlic, you'd be disappointed with a mouth full of high density plastic.

$14.95

HAPPY HOPPING FROG — OWI-MSK672

Almost comical, this little green amphibian friend leaps with a joyful sense of freedom. Using its hind legs and rubber feet, Happy Hopping Frog jiggles its eyes as a dog would wag its tail acknowledging its love and appreciation to its owner. The tailless, leaping mini solar kit, activated by the power of the sun's rays.

$14.95

ATTACKING INCHWORM — OWI-MSK673

$14.95

Attacking Inchworm has orange spiky limbs to ward off any predator who seeks to challenge it as a delectable delight. The sun's rays power this mini solar kit to slither along to safety. The mechanical movements simulate the movements of its soft-bodied derivative.

SUPER SOLAR RACING CAR — OWI-MSK671

ZOOOOOOMM! Super Solar Racing Car has surprising speed. One source of such power is derived from the sun's powerful rays of light. Thank goodness, you can control this speedster from any dangerous mishaps by shielding its power source and immediately depressing its brakes to stop. Super Solar Racing Car is easy to assemble and demonstrates alternative energy principles. Less than a dozen parts to assemble.

$11.95

FRIGHTENED GRASSHOPPER — OWI-MSK670

$11.95

Eyes jiggle, legs wiggle, and antennas sway to-and-fro is the combo tango-jitterbug-frightened-grasshopper dance. Pint-sized and power to pack a punch, this enticingly amusing solar bug will surely capture your heart. Turn on its power switch (the sun) and you will smile. This frolicking fancy is easy to assemble and demonstrates an alternative energy principle. Less than ten parts to snap together.

NEW! Rookie Solar Racer — OWI-MSK661

$7.95

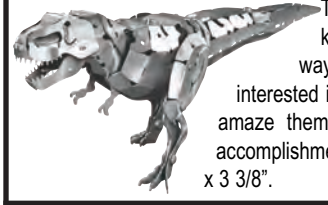
Harnessed by the most powerful and efficient source of energy…the sun. The photovoltaic cell (solar panel) converts the sun's energy directly into electrical energy. Ideal for a do-it-yourself science fair, after-school, or summer workshop project with the bonus gift of learning how automotive transmission and motors work.

Ages 9 & up

OWI KIT® ALUMINUM KITS

T-Rex — Model OWI-371

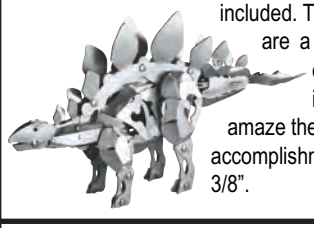
$15.95



With soft pre-punched aluminum parts, screws, nuts, and assembly tools included. These dinosaur kits are a great way to get children interested in kit building and amaze themselves with their accomplishments. 8 3/8" x 2½" x 3 3/8".

Stegosaurus — Model OWI-372

$15.95



With soft pre-punched aluminum parts, screws, nuts, and assembly tools included. These dinosaur kits are a great way to get children interested in kit building and amaze themselves with their accomplishments. 8½ x 1" x 4 3/8".

Triceratops — Model OWI-373

$15.95

With soft pre-punched aluminum parts, screws, nuts, and assembly tools included. These dinosaur kits are a great way to get children interested in kit building and amaze themselves with their accomplishments. 8" x 2¼" x 3 3/8".

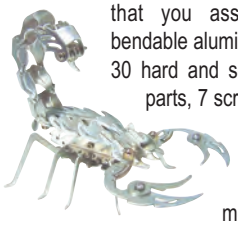
Mega Mantis — Model OWI-351

$13.95

Almost lifelike, OWI's aluminum insect building kit features a praying mantis insect that you assemble from metal and bendable aluminum parts. The kit contains 25 hard and soft pre-punched aluminum parts, 7 screws, 7 nuts, 4 metal springs, and even assembly tools are included. 7" x 4" x 4.5".

Samurai Scorpion — Model OWI-352

$13.95



Almost lifelike, OWI's aluminum Scorpion that you assemble from metal and bendable aluminum parts. The kit contains 30 hard and soft pre-punched aluminum parts, 7 screws, 7 nuts, 3 springs, and even assembly tools are included. Its claws, arms, legs, and tail are all moveable. 6.5" x 3.5" x 3".

Rhino Beetle — Model OWI-353

$13.95

Almost lifelike, OWI's aluminum beetle building kit is a cool to build the 26 hard and soft pre-punched aluminum parts, 4 screws, 4 nuts, and 7 springs with the assembly tools that are included. Rhino Beetle's legs, wings, and horn are all moveable.

Ages 9 & up

OWIKIT® MINI SOLAR KITS

No soldering required

No batteries required!

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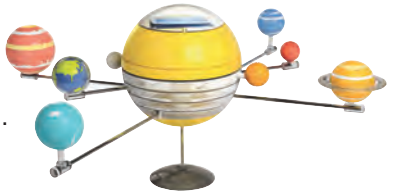
For the first time, experimenters with little or no experience at all. These handheld kits all move and demonstrate alternative energy principles. No batteries or special tools required for assembly. The included solar cell lasts up to two years! ALL the kits work best outdoors under direct sunlight, but some may work under a 100-watt light bulb or halogen bulb close up.

OWI The Solar System

OWI-MSK679

$21.95

Young astronomers will delight in OWI's newest Mini Solar Kit – as they build, paint and watch their very own Solar System come to life with real solar energy. Planets orbit around the solar-paneled "sun" that drives a motor so the planets actually move. The kit comes with 6 colors of opaque acrylic paint, plus brush.



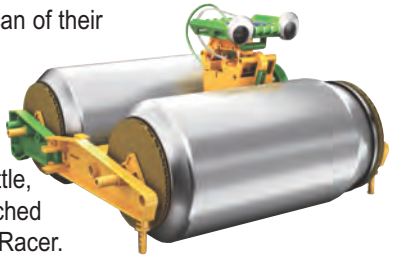
NEW!

Super Solar Recycler

OWI-MSK616

$19.95

The Super Solar Recycler Kit is powered completely by natural light so you never have to worry about batteries. Your children can recycle a can of their favorite soft drink to create Street Roller and Walking Robot, create Bottle Yacht, Drummer Robot and Flying Bird using a plastic water bottle, and even turn your old scratched CD's into the super cool CD Racer.



NEW!

Penguin Life

OWI-MSK691

$19.95

Young astronomers will delight in OWI's newest Mini Solar Kit – as they build, paint and watch their very own Solar System come to life with real solar energy. Planets orbit around the solar-paneled "sun" that drives a motor so the planets actually move. The kit comes with 6 colors of opaque acrylic paint, plus brush.

NEW!

Green Life

OWI-MSK690

$19.95

Kids can build an eco-friendly and Green Life future. They can see the benefits of putting solar energy to work and discover how solar cells generate electricity from light. The kit consists of a powerful solar cell, rechargeable battery (included), house, and car. It is easy to assemble: no screws, nuts, or fuss. Just simply plug-in the car into the house, solar energy converts into electric power for storage and application.

Aerial Cable Car

OWI-MSK676

Aerial Cable Car power grid system is simple: bright sun – "power on", little or no sun – "power off". Transport cable, automatic round trip return stoppers, solar panel and 30 plastic parts to assemble are included. It challenges young people to be technically precise with miniature parts. Clear easy-to-follow instructions; and teaches students to follow precise visual diagrams.

$19.95

Sonic F1

OWI-MSK674

The perfect balance of aerodynamics, transmission, speed, and stylish design has made SONIC F1 the top prospect in the racing community. When equipped with the most power engine, the sun, Sonic F1 races at amazing speeds. It consumes no fossil resources making it an educational tool that teaches alternative energy concepts. Easy-to-build and fun to play. Have hours of fun experimenting with it in the sun. Eight plastic parts to assemble.

$17.95

Peppy Orangutan

OWI-MSK675

$17.95

Always introducing unique products, OWI has outdone itself with a brand new mysterious solar kit that traverses across ropes, hand-over-hand like a monkey. Only 15 plastic parts to assemble. Clear easy to follow instructions. PEPPY Orangutan can motivate students to learn about micro-robotics and solar energy. It also teaches students to follow precise visual diagrams.

OWI Solar Bullet Train

Model OWI-MSK680

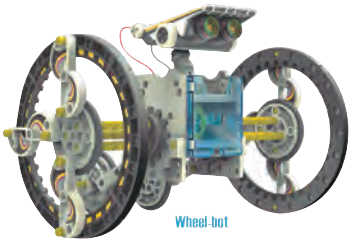
$14.95

Two interlocking cars attach to the engine, allowing young builders to focus on self-motivation, perseverance and manipulation. The Solar Bullet Train is an excellent beginner building kit designed to teach how solar power is used to drive a small motor. Its 18 parts snap together and are secured with only four screws. Train enthusiasts of all ages will enjoy building this amazingly fast eco-friendly train and watch it travel without rails.

OWIKIT® SOLAR KITS

(All kits require assembly, but no soldering)

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.



NEW!

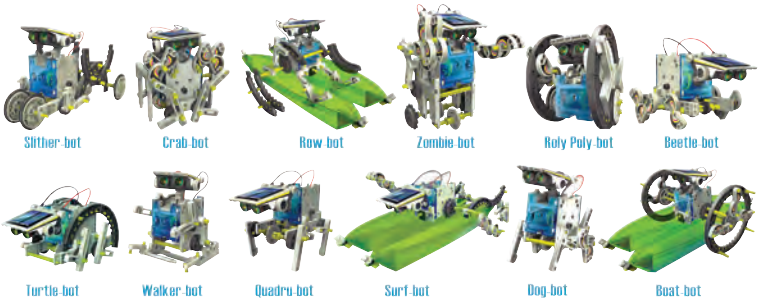
14 in 1 KIT EDUCATIONAL SOLAR ROBOT

OWI-MSK615

Best Green DR. TOYS 2013

AWARD WINNING

$34.95



The solar powered robot MSK615 can be transformed into 14 different robot modes which include a multitude of comical and functional movements. The user can easily change from a wagging-tail dog -> running beetle -> walking crab -> surfer -> speedster -> zombie chaser… The robot kit provides unique accessories (included) and parts that make the robot move on land and water.Fortunately, this product is powered by the sun, so there are no batteries required.

There are two levels in building the robot kit. Level one includes: Turtle-bot, Beetle-bot, Quadru-bot, Boat-bot, Walker-bot, Dog-bot, and Wheel-bot. After they amuse themselves with the entry level, can challenge their manipulative skills with second level: Roly Poly-bot, Auto-bot, Slither-bot, Surf-bot, Zombie-bot, Crab-bot, and Row-bot. Additional features includes: adjustable polarity on the solar panel to change direction of motor rotation, retractable robot head which can be quickly stored in the upper body, the robot head can be installed in the front, top or rear of the gearbox, and a transparent housing to see the movements of the gears. With 14 in 1 Educational Solar Robot Kit, let them learn about their future and have fun doing it with.

OWI 7-in-1 Solar Space Fleet

OWI-MSK641

$28.95

The Solar Space Fleet Kitis an innovative solar powered science kit that can transform into seven different lunar modules and energized via direct sunlight or micro rechargeable battery. The micro rechargeable battery can be charged in two ways by direct sunlight or by alkaline batteries.

OWI 7-in-1 Rechargeable Solar Transformers

OWI-MSK640

$26.95

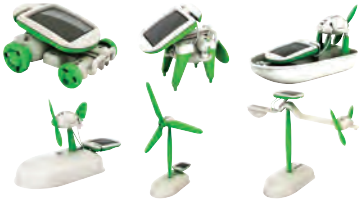
It features all snap together plastic parts (no screws, tools required), solar panel and accessories. It is incredibly easy to assemble the 7 different modules: 2 power charging stations and 5 different vehicles. The transforming rechargeable station has 2 output plugs; one for solar recharging and the other for battery recharging.

OWI 6-in-1 Educational Solar Kit

OWI-MSK610

$21.95

The 6-in-1 Educational Solar Kit, an excellent beginner building kit designed to teach how solar power is used to drive a small motor. Children use the 21 snap together parts (no tools required) to build six different working models: airboat, windmill, puppy, car and two planes.

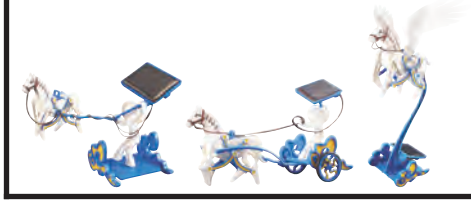


OWI 3-in-1 Solar Stallion

OWI-MSK613

$21.95

Triple your fun in the sun with 3-in-1 Solar Stallion. This solar-powered kit helps kids understand the benefits of renewable energy while creating their own fun, battery-free toy. Three easy-to-build equine choices: 'Horse Trainer', 'Pegasus', or 'Chariot'.

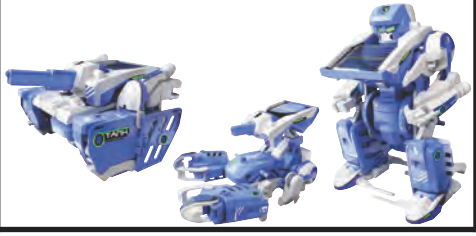


OWI 3-in-1 T3 Transforming Solar Robot

OWI-MSK614

$21.95

"T3" easily transforms into three intergalactic designs: Tank, Robot, and Scorpion. Easy instructions and basic building skills are that's needed for young science fiction buffs to see the benefits of solar energy before their very eyes.



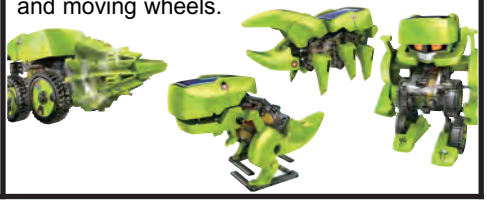
OWI 4-in-1 T4 Transforming Solar Robot

NEW!

OWI-MSK617

$19.95

This kit gives your child the option to easily transform between one of four different modes: Robot – walking legs as well as moving wheels, Insecta – 6 walking legs as well as moving jaws, T-Rex - 2 walking legs and moving jaws, and Drill Vehicle – similar to a miner's driller/drilling bit and moving wheels.



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ROBOT KITS

(All require assembly, but no soldering)

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

ROBOTIC ARM EDGE OWI-535

(Wired Control)

$61.95

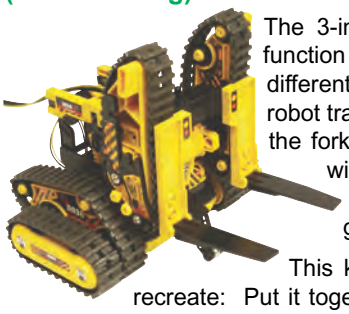
Command the gripper to open and close, wrist motion of 120°, an extensive elbow range of 300°, base rotation of 270°, base motion of 180°, vertical reach of 15 inches, horizontal reach of 12.6 inches, and lifting capacity of 100g. WOW! Some of the added features include a search light design on the gripper and a safety gear audible indicator is included on all five gear boxes to prevent any potential injury or gear breakage during operation. Total command and visual manipulation using the "5's": five-switch wired-controller, five motors, and five joints. Dimensions: 9" (H) x 6.3" (W) x 15" (L)

Requires four (4) "D" batteries.

3-IN-1 ALL TERRAIN ROBOT OWI-536

(Transforming)

$57.95



The 3-in-1 All Terrain Robot is a multi-function tracked mobile robotic kit. Utilize different track modules and make your robot transform into 3 amazing variations: the forklift, rover, and gripper. Using the wired controller, command the robot to move forward, backward, turn, grip and lift.

This kit allows students to create and recreate: Put it together, take it apart, make another module…It's all about flexibility, and intelligent thinking. But luckily, kids don't have to be robotics engineers to create and achieve. With the 3-in-1 All Terrain Robot, they learn as they play.

Requires four (4) "AA" batteries.

USB INTERFACE CABLE & SOFTWARE (OWI-535) OWI-535USB

Have real time manual control of the robotic arm and program the arm to perform a sequence of movements.

(Windows®-based)

$43.95

OWI ROBOT ACTIVITIES & EXPERIMENTS

EXP-535

Provides multiple step-by-step activities and experiments for the Robotic Arm Edge robot in both manual and computer modes.

$23.95

OWI Green Energy & Robotics Technology Curriculum

OWI-GRNCUR

Challenge young minds to grow through further explortion of fast-changing worlds of green energy and robotics

$11.95

BINARY PLAYER ROBOT OWI-9875

(Programmable, Infrared Sensor)

$39.95

Binary Player Robot is controlled by black and white patterns on a disk, which are read by an infrared sensor. Particular patterns activate either of two wheels to turn left, right, forward, or pause. These on/off commands illustrate the basic principles of binary coding. To change a movement program, the operator simply creates a new disk pattern. Set your course and explore the fascinating world of Binary Player Robot!

Easy to assemble, this OWIKIT Intermediate building level robot makes a great entrant for robotic competitions, science fair projects, robotic workshops, after-school programs, special events, gifts, science enrichment camps, and classroom activities.

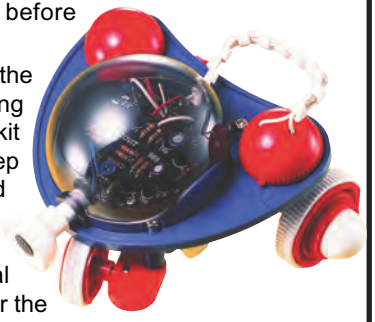
Requires two (2) "AA" batteries.

HYPER PEPPY OWI-969

(Sound/Touch Sensor)

$35.95

Explore the fundamentals of robotics with this informative and entertaining robot kit. Hyper Peppy is an intelligent robot with a touch/sound sensor. If it comes in contact with an object or hears a loud noise (such as hands clapping), Hyper Peppy automatically reverses, then turns left before embarking on a new course.



Hyper Peppy is lots of fun from the moment is arrives. Requiring only basic hand tools, the kit contains complete step-by-step instructions, pre-assembled printed circuit board, condenser microphone, and an easy-to-assemble mechanical drive system. It's an ideal gift for the hobbyist or budding scientist.

Requires two (2) "AA" batteries.

JUNGLE ROBOT OWI-9870

(Sound Sensor)

$34.95

Jungle Robot traverses "hand over hand" like an orangutan or walks on the ground like a gorilla. A condenser microphone and printed circuit board controls your multi-function friend. When you think jungle robot is asleep, just cry "Wake UP!"

Your robot will immediately start climbing or walking for a pre-set time and reset itself waiting for another command.

Educators, science museums, and hobbyist will surely appreciate the durability, educational value, and endless hours of amusement for children and adults too!

Requires two (2) "AA" batteries.

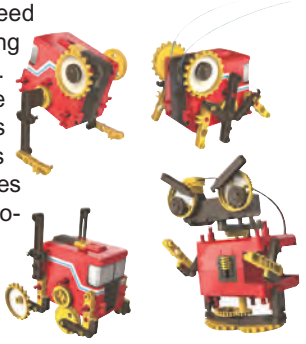
EM4 ROBOT OWI-891

(Motorized)

$19.95

NEW!

A boost in confidence - the EM4 Educational Motorized Robot Kit is your 3-speed vehicle to positively impact a young builder by using OWI's robotics theory. OWI has designed this kit for the lovers of simplicity. Everything from its compact easy-assembly design to its need for only one "AA" battery provides your child with a fun and easy-to-assemble robotic playmate.



A child can bring EM4 Educational Motorized Robot Kit to life in one of its four exciting modes: Cricket, Beast, Trailer, and good ole Grandpa-bot.

Requires one (1) "AA" battery.

Robotics

Model EDU-7090

Join forces with the world of robotics and assemble 3 fantastic robots. One robot detects objects using infrared rays (EDU4004), the wake-up robot is sensitive to light (EDU4003) and the third robot is operated by any TV remote control (EDU4001). A separate circuit and body are supplied for each robot: just fix the selected circuit onto the robot base (chassis) and add the corresponding transparent body.
No soldering required.

$45.95

Best Seller

(Only one robot can be built at a time)

Requires two (2) "AA" batteries.

Remote Control Robot

Model EDU-4001

$19.95

Build your own remote control robot controlled by your TV remote! The kit also includes parts for inventing your own robot arm.
No soldering required.

Requires two (2) "AA" batteries.

Treasure Finder

Model EDU-4002

$19.95

Find hidden riches with this treasure finder robot! This robot uses a metal detector to discover metallic objects.
The kit also includes parts for inventing your own robot arm.
No soldering required.

Requires two (2) "AA" batteries.

Wake Me Robot

Model EDU-4003

$19.95

The Wake Me Robot uses a light sensor, making it sensitive to light. The kit also includes parts for inventing your own robot arm.
No soldering required.

Requires two (2) "AA" batteries.

The Guide Robot

Model EDU-4004

$19.95

The Guide Robot senses objects in its path using an infrared ray. The kit also includes parts for inventing your own robot arm.
No soldering required.

Requires two (2) "AA" batteries.

ELENCO® ROBOT KITS

(All require assembly, but no soldering)

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

Radio Controlled Titan Tank Kit

Model 21-531N2 (two pack)

The Titan Tank is an infrared remote control kit. Its microprocessor provides four different channels that allow up to four Titans to fight each other at the same time. Makes a sound when shooting and when it is hit. The Titan moves using six wheels that can move forward, backward, right and left.

$104.95

Model 21-531N2
(two pack)
SAVE $15!

$59.95

Model 21-531N
(One Pack)

Requires four (4) "AA" and four (4) "AAA" batteries.

Radio Controlled Robot Beetle Kit

Model 21-534N

The Beetle is an infrared remote control kit. Its microprocessor provides four different channels that allow up to four Beetles to operate at the same time. Two motors operate the open, close, lift and lower functions of the large pinchers in the front. The Beetle moves using six wheels that can move forward, backward, right and left. This kit is ideal for learning about gear structure, motor principles, and electronic circuits.

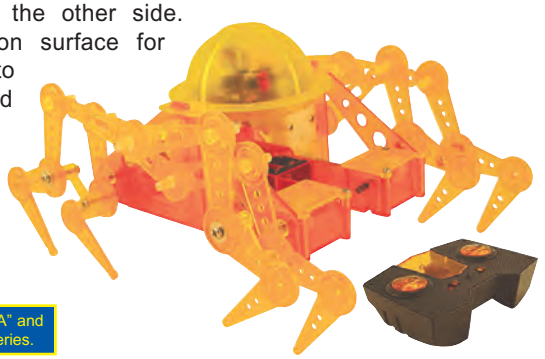
$69.95

Requires four (4) "AA" and four (4) "AAA" batteries.

Radio Controlled Space Nine Kit

Model 21-532N

The Space Nine is an eight-legged star explorer. Use the remote control to make it move and turn. The Space Nine can walk on rough surfaces, turn left, right and even cross rocks. When it moves, its first and third legs on one side of its body move with the second and fourth leg on the other side. Create a moon surface for Space Nine to explore and enjoy the fun!



$59.95

Requires four (4) "AA" and four (4) "AAA" batteries.

Follow Me

Sound Detecting Robot

Model 21-887

$41.95

A very interesting sound detecting robot kit. The four built-in microphones detect the sound source and the robot turns and moves towards it. Just clap and the robot will come to you. Clap again from another position, and the robot will turn and move in that direction.

Requires four (4) "AAA" batteries.

Line Tracking Robot

Light Sensor Robot Kit

Model 21-890

$29.95

The Line Tracking Robot will follow a black line drawn on white paper by using two photo interrupters. Create different routes with black electronic tape or a black marker and see what your Line Tracking Robot can do!

Requires four (4) "AAA" batteries.

Ages 12 & up — ELENCO® ROBOT KITS

(All kits on this page require soldering assembly)

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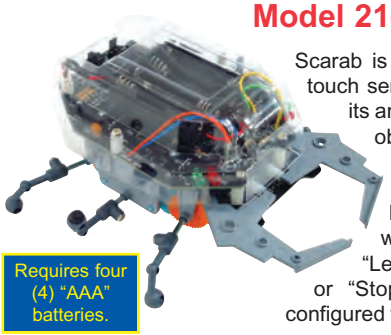
Scarab Robot Kit
Model 21-884

$44.95



Scarab is a robot that makes use of two touch sensors to detect obstacles. When its antennal (touch sensor) detects an object in its path, Scarab will go backward first and automatically follow a two-step maneuver to help it overcome the obstacle, which can be a combination of "Left Turn", "Right Turn", "Reverse", or "Stop". The Scarab robot can be configured with different sets of movements.

Requires four (4) "AAA" batteries.

Escape Robot Kit
Model 21-886

$44.95

Escape Robot kit works just like an A.I. robot. It never fails to find its way out of a maze. The Escape Robot makes use of three infrared emitting diodes and one infrared receiving module to send and receive signals and detect obstacles. Escape Robot has a built-in microprocessor which enables it to "think" on its own, as it processes information about its environment and maneuvers itself around obstacles. Escape Robot moves on six legs. The kit comes complete with two sets of differently designed legs, which provides endless fun and excitement with its different sets of movements.

Requires four (4) "AAA" batteries.

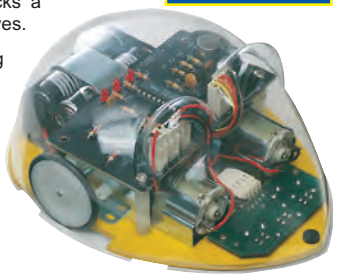
Line Tracking Mouse Kit
Model 21-880

$39.95

Requires four (4) "AA" batteries.

How Magical! A smart Robot Mouse tracks a black line using a photo interrupter for its eyes.

How Funny! Create a twisting and turning road layout yourself with black tape on a white background. See how it tracks the black line to find the target.

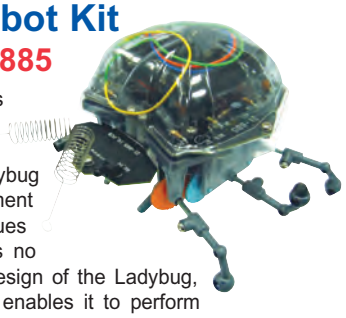


Features

- Sound activated
- Uses three photo interrupters to detect a black line.
- Two sets of gear motors (unassembled)
- Programmed integrated circuit (IC)

Ladybug Robot Kit
Model 21-885

$32.95



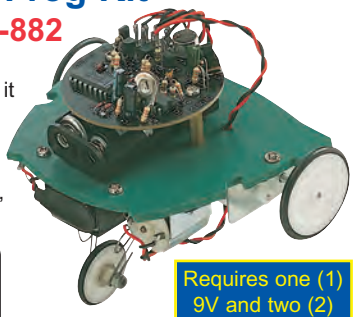
Ladybug Robot moves with its six legs and makes use of infrared emitting diodes as its "eyes" to avoid obstacles along its path. Ladybug automatically makes a left turn the moment it detects an object in its path. It continues to move forward after that if there is no shadow in front of the sensor. The design of the Ladybug, which is based on two sets of legs, enables it to perform different sets of movements, thereby providing endless fun and excitement.

Requires four (4) "AA" batteries.

Turning Frog Kit
Model 21-882

$26.95

This is an interesting robot kit. When it detects sounds, it will move and repeat the following steps sequentially: Start (move forward), Stop, Left Turn, Stop, Right Turn, Stop.



Features

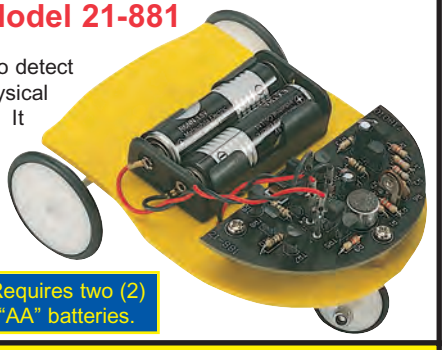
- Two sets of gear motors (unassembled)
- Programmed integrated circuit (IC)

Requires one (1) 9V and two (2) "AA" batteries.

Sound Reversing Car Kit
Model 21-881

$21.95

A Robot Car with a sensor to detect noise (like a clap) or physical contact for its reaction. It moves forward when it detects noise and reverses when it touches obstacles.



Features

- Uses a microphone as a sound sensor.

Requires two (2) "AA" batteries.

Ages 12 & up — velleman® ROBOT KITS

(soldering assembly required)

Crawling Microbug
Model MK165

$29.95

Requires two (2) "AAA" batteries.

Attractive bug-shaped miniature robot. The microbug is always hungry for light, it drives towards it.

Specifications

Power supply: Two (2) 1.5V "AAA" battery operation (not included)

Dimensions: 5.2" (L) x 2" (W) x 3.5" (H)

Features

- Two open chassis sub-miniature motors.
- Adjustable light-sensitivity suits almost any light condition and allows to control its "bug-like" behavior.
- Adjustable speed
- Choose between two different walks
- LED "eyes" indicate driving direction
- Stops in total darkness

Crawling Microbug
Model MK129

Attractive, bright-colored, bug-shaped miniature robot. The microbug is always hungry for light, it drives towards it.

Requires two (2) "AAA" batteries.

Specifications

Power supply: Two (2) 1.5V "AAA" battery operation (not included)

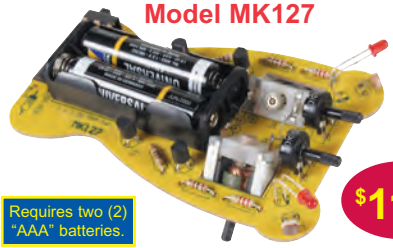
Dimensions: 4.3" (Ø) x 3.5" (H)

$15.95

Features

- Two open chassis sub-miniature motors.
- Adjustable light-sensitivity suits almost any light condition and allows to control its "bug-like" behavior.
- Adjustable speed
- Choose between two different walks
- LED "eyes" indicate driving direction
- Stops in total darkness

Running Microbug
Model MK127



Requires two (2) "AAA" batteries.

$11.95

Specifications

Power supply: Two (2) 1.5V "AAA" battery operation (not included)

Dimensions: 4" (L) x 2.4" (W)

Attractive, bright-colored, bug-shaped miniature robot. The microbug is always hungry for light, it drives towards it.

Features

- Two open chassis sub-miniature motors.
- LED "eyes" indicate driving direction
- Stops in total darkness
- Adjustable light-sensitivity suits almost any light condition and allows to control its "bug-like" behavior.

Ages 12 & up

ELENCO® SOLDER PRACTICE KITS

Learn how to solder!

Hands-on Basic Electronics Kit

Model SKM-250 with Training Course

$49.95

A basic hands-on kit that introduces you to good soldering techniques while working on state-of-the-art printed circuit board circuits. You will learn the basics of digital multimeters and circuit troubleshooting.

Some of the features of this kit are as follows: Identifying components, color-code reading exercises, resistors, capacitors, and inductors; includes color code calculator (Model CC-100); 163 solder points, standard soldering connections, close-tolerance soldering, and tack soldering; complete voltage and resistance analysis of circuit; desoldering exercise.

This kit requires soldering.

Color Code Calculator
Model CC-100

Includes

- **SL-75** Variable temperature station with conical tip
- **SL-75T2** Extra wedge tip
- **M-1000E** Digital multimeter
- **SP-3B** Solder practice kit
- **ST-3** Adjustable wire stripper cutter
- **SE-1** Solder ease kit

Cardboard carrying case with handle included!

Requires two (2) 9V batteries.

Fundamentals of Soldering Kit

NEW!

Model SK-275

$49.95

Use this kit to learn or just brush up on your soldering skills. Kit includes soldering station, tools and solder practice board.

Color Code Calculator
Model CC-100

Cardboard carrying case with handle included!

Includes

- SL75 - Elenco® Variable Temperature Soldering Station
- SL75T2 - additional wedge tip
- ST1 - Diagonal Cutter
- ST2 - Mini Long Nose Pliers
- ST20 - Safety Goggles
- ST30 - Premium Wire Stripper
- SE1 - Solder Ease 4 Piece Kit
- SP4 - Desoldering Pump
- SP1A - Elenco Learn to Solder - Practical Soldering Project Kit

Practical Soldering Project Kit

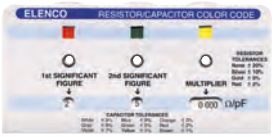
Model SP-3B with Training Course

$9.95

ELENCO® is proud to present another superb solder practice kit designed to meet the ever increasing demands on proper soldering procedures. Some of the features of this kit are as follows:

- Identifying components
- Color code reading exercises, resistors, capacitors, and inductors.
- 163 solder points, standard soldering connections, close-tolerance soldering, and tack soldering.
- Desoldering exercise
- Evaluation exam of performed soldering connections. Written & visual.
- Complete voltage and resistance analysis of circuit.

Includes color code calculator.



Requires one (1) 9V battery.

WEAR SAFETY GLASSES

see page 65

Practical Soldering Project Kit

Model SP-1A with Training Course

$9.95

Working with printed circuit boards is in the future of every electronic technician. Almost every electronic device today has a printed circuit board and whether you are assembling a PC board or repairing it, you must understand the basics of working with these boards. Good soldering requires practice and an understanding of soldering principles. This solder practice project will help you achieve good soldering techniques, help you become familiar with a variety of electronic components, and provide you with dynamic results.

Requires one (1) 9V battery.

Deluxe How to Solder Kit

Model SK-175 with Training Course

$34.95

Learn how to solder properly using a variable temperature solder station providing a temperture range of 350°F to 900°F. It will provide the correct temperture for the broad range of electronic components that are present in today's electronic equipment.

This kit requires soldering.

Includes

- **SL-75** Variable temperature station with conical tip
- **SL-75T2** Extra wedge tip
- **SP-1A** Solder practice kit
- **ST-1** Side cutting pliers
- **SE-1** Solder ease kit

Cardboard carrying case with handle included!

Requires one (1) 9V battery.

Learn to Solder Kit

Model AK-100

$16.95

This kit is a must for the beginner. After practicing your soldering techniques on the special area of the board, you'll be ready to assemble this European siren with flashing LEDs. This kit also includes a soldering iron and wire cutters.

This kit requires soldering.

Soldering Iron
SR-1N

Wire Cutter
ST-1

SP-1A

Requires one (1) 9V battery.

Ages 12 & up ELENCO® EDUCATION KITS

(All kits require soldering)

Quantity Discounts Available . . . CALL!

Complete with PC Board and Instruction Book

Space War Gun
Model K-10 — $8.95

This gun gives you realistic sounds and flashes you expect in a Space Gun. Produces rapid fire or single shot with two flashing LEDs.

Requires one (1) "9V" battery.

Christmas Tree
Model K-14 — $13.95

Produces flashing colored LEDs and three popular Christmas melodies!

Requires one (1) "9V" battery.

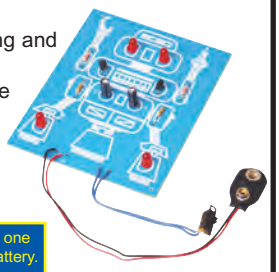
Electronic Cricket
Model K-16 — $8.95

The Electronic Cricket is the perfect project and fun game for family and friends. You will drive your friends crazy trying to find it!

Requires one (1) "9V" battery.

LED Robot Blinker
Model K-17 — $8.95

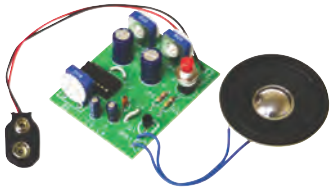
With the LED Robot Blinker, you will learn about free-running oscillators. You'll have fun building, displaying and learning about the LED Robot Blinker.



Requires one (1) "9V" battery.

Digital Bird
Model K-19 — $8.95

There are all kinds of birds in this world, singing all kinds of songs. But neither you nor they probably have heard anything quite like this!



Requires one (1) "9V" battery.

Yap Box
Model K-22A — $11.95

Makes six exciting sounds:

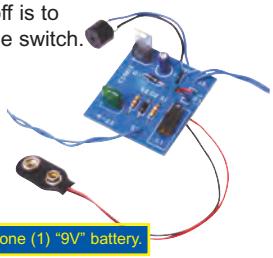
- Laser Gun
- Diesel Horn
- Siren
- Wolf Whistle
- Puppy Bark
- Machine Gun

Case Included.

Requires one (1) "9V" battery.

Burglar Alarm
Model K-23 — $8.95

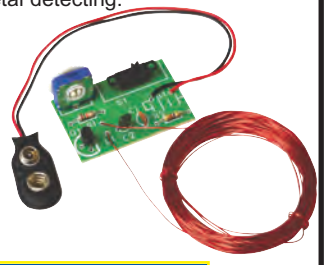
The Burglar Alarm is an easy-to-build alarm control for your car, house, room, or closet. After the alarm is on, the only way to turn it off is to open the switch.



Requires one (1) "9V" battery.

Metal Detector
Model K-26 — $8.95

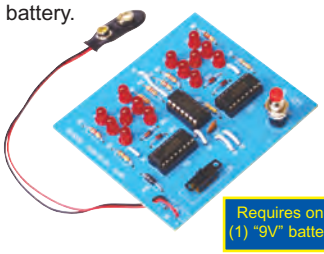
Find new money and old treasure. Get started in the fascinating hobby of metal detecting.



Requires one (1) "9V" battery.

Pocket Dice
Model K-28 — $11.95

The Pocket Dice is a handy little project to be used with any game of chance. Since it uses CMOS circuitry, it has the advantage of operating off a 9-volt battery.

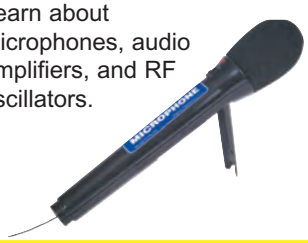


Requires one (1) "9V" battery.

FM Microphone Kit
Model K-30/ AK-710 — $13.95

With training course

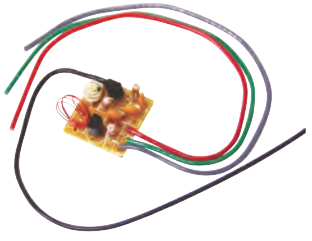
Transmit your voice on any FM radio. Range up to 100 feet. Learn about microphones, audio amplifiers, and RF oscillators.



Requires two (2) "AA" batteries.

Telephone Bug
Model K-35 — $8.95

Our bug is only the size of a quarter, yet transmits both sides of a telephone conversation to any FM radio. No battery needed.



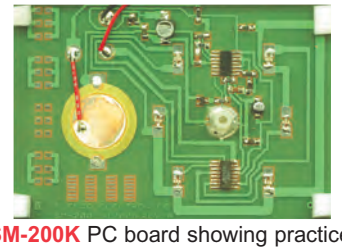
Sound Activated Switch
Model K-36 — $10.95

Clap your hands together twice and the light comes on, clap again twice and off it goes. Many other uses. Complete with microphone.

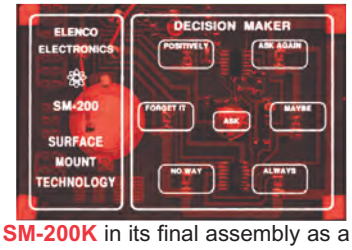
Requires one (1) "9V" battery.

Surface Mount Technology Solder Practice Kit
Model SM-200K **with Training Course** — $21.95

The future of electronics is headed for miniaturization through surface mount technology (SMT). Taking our course of training will prepare you for the future. Includes all parts and instructions to give you experience on working with surface mount components. The finished project is a decision maker with 6 flashing LEDs to help you make vital decisions.



SM-200K PC board showing practice areas & mounted components



SM-200K in its final assembly as a decision maker

Requires one (1) 9V battery.

Electronic Christmas Tree
MK100

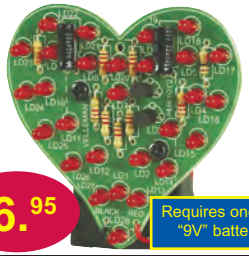
Christmas was never so congenial! 16 blinking LEDs.
* Very low power consumption: max. 4mA.

$7.95

Requires one (1) "9V" battery.

Flashing LED Sweetheart
MK101

Show your love in an original way that your heart still beats faster for him or her. 28 LEDs form 2 blinking hearts.

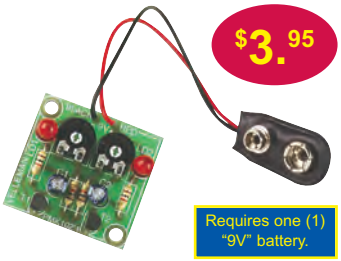


$6.95

Requires one (1) "9V" battery.

Flashing LEDs
MK102

For different applications (such as model construction), and recreational. Adjustable flashing speed with two potentiometers.

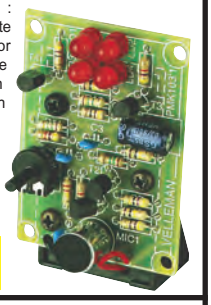


$3.95

Requires one (1) "9V" battery.

Sound to Light Unit
MK103

Four high-intensity LEDs light up and react simultaneously on every sound. For different funny and practical applications, such as : sound indicator, simple sound-to-light unit for music, for the hearing impaired : can be used to indicate the telephone, door bell. Adjustable sensitivity with potentiometer. Built-in microphone.



$6.95

Requires one (1) "9V" battery.

Electronic Cricket
MK104

Can be used for fun or to simulate a hot summer night. Automatically comes on when it gets dark. Cricket repetition (time between two crickets), effect and tone adjustable. Adjustable light sensitivity.

$8.95

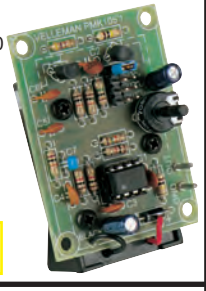
Requires one (1) "9V" battery.

Signal Generator
MK105

Signal output: sine wave, triangle, square wave and integrator (selectable through jumper).

Signal frequency: about 1kHz (fixed)

Output level: adjustable from 0 to 100mVrms (LEVEL potentiometer)

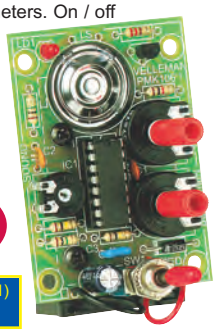


$7.95

Requires one (1) "9V" battery.

Metronome
MK106

Speaker included. LED beat indication. Adjustable volume and beats / minute with potentiometers. On / off switch on board.



$12.95

Requires one (1) "9V" battery.

LED Running Light
MK107

8 LEDs. Different LED running effects are selectable (PROG push button). Adjustable effect speed (SPEED potentiometer). Power stand-by push button (OFF push button).

$11.95

Requires one (1) "9V" battery.

Water Alarm
MK108

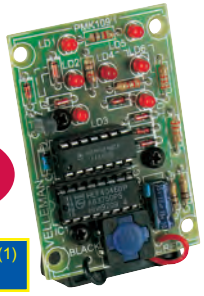
Gives alarm sound when water is detected. Incorporated alarm buzzer. Water sensor can be placed at a distance by cutting the board and using wires to connect the sensor.

$5.95

Requires one (1) "9V" battery.

Electronic Dice
MK109

Electronic die with LED indication. Rolls slowly out when the push button is released.

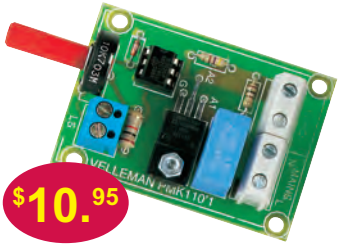


$9.95

Requires one (1) "9V" battery.

Simple One Channel Light Organ
MK110

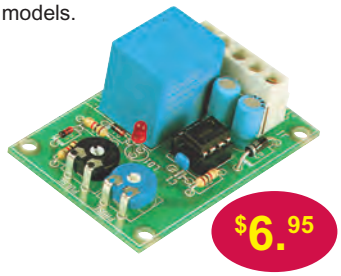
With loudspeaker input. Modulates a lamp according to the music signal at the input. Optical isolated loudspeaker input. Adjustable sensitivity.



$10.95

Interval Timer
MK111

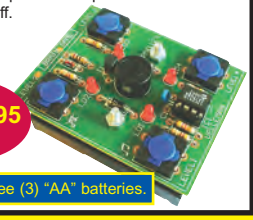
For intermittent operation of circuits and equipment. Blinking light, video/photo single frame shooting, slide projector control, miniature models.



$6.95

Brain Game
MK112

Just 4 LEDs and 4 push buttons provide hours of fun. The aim-of-the-game is to repeat a pattern, which is generated at random. The pattern is played both visually and audible or visually only (selectable). It features 4 difficulty levels, which can be selected at start-up. The replay speed gradually increases during the game, to make it even more challenging. Low power consumption. Microprocessor controlled. Auto power off.

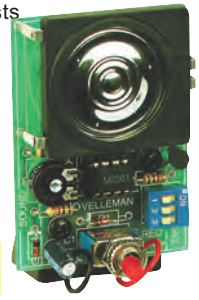


$10.95

Requires three (3) "AA" batteries.

Siren Sound Generator
MK113

Generates four different sounds: police siren, fire brigade, emergency vehicle, and laser gun. RV1 adjusts sound pitch. On/off switch and PCB speaker included.



$13.95

Requires one (1) "9V" battery.

Riding Santa
MK116

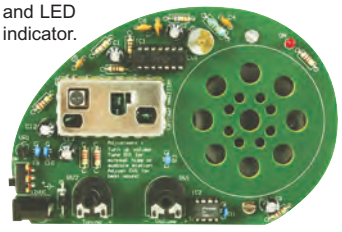
$29.95

126 LED multicolor animated Xmas gadget. No need to remove battery when using external supply. 12V operation possible for use in cars, trucks. On/off switch included.

FM Radio
MK118

$29.95

Double fun: building and listening! Easy-to-assemble with no coils to wind. One single adjustment; pre-assembled and tested FM front end. Receives the complete FM band: 88-108 MHz. Includes ON/OFF switch, volume control and LED indicator.



We can special order products from www.vellemanusa.com not shown here for you! Just call or e-mail for a quote.

Roulette
MK119

37 LEDs. Spinning sound. 'Winner'-tune for each color. Spins LEDs between games. Pushbutton operation. Microprocessor technology.

$24.95

Requires three (3) "AA" batteries.

Light Barrier
MK120

Applications: announce visitors, warn against burglars, set boundaries, for science projects, etc.

$10.95

Requires three (3) "AA" batteries.

Classic TV Game
MK121NTSC

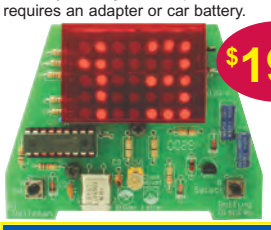
This kit will remind you of the original video ping-pong game!

$21.95

Requires three (3) "AA" batteries.

Rolling Clock
MK123

Nicely animated rolling time and date display. Graphic display with 35 LEDs. Select hours, minutes, month or day with SELECT and enter the values with SET. Time display in 12h-mode (24h-mode when setting clock). Fine-tune the clock by turning CV1. Operates on 9-12VDC; requires an adapter or car battery.



$19.95

Requires one (1) "9V" battery for back-up.

Light-sensitive Switch
MK125

Switch-on at dusk, turn off at dawn, fully automatic.
Wide-range adjustable sensitivity. Delay circuit avoids cycling.

$9.95

Kitchen Timer
MK128

One minute to one hour timing. Single button, straight-forward operation. Clear 16-LED readout. Audible and visible alarm with discrete pre-alarm. Auto power-off. Attractive designer enclosure.

Requires three (3) "AAA" batteries.

$21.95

3D Xmas Tree
MK130

Six flashing red LEDs. Extra green and yellow LEDs provided to customize your tree. Can be hung and supplied through the wires.

$10.95

Requires one (1) "9V" battery.

Traffic Light
MK131

Miniature traffic light as used on four-way junctions. Realistic operation with adjustable delay. 12 LEDs. Great for model railroads, exhibitions, as a toy, etc.

$10.95

Requires one (1) "9V" battery.

Cable Polarity Checker
MK132

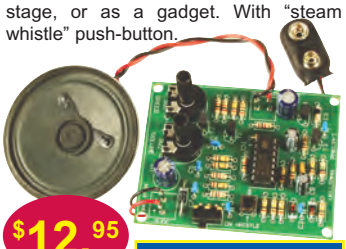
Check cables for continuity and identify individual wire. Ideal for speaker cable polarity checking. LED indication for open circuit, shorts and correct or wrong polarity. Pushbutton operation with auto power-off.

$9.95

Requires one (1) "9V" battery.

Steam Engine Sound Generator w/ Whistle
MK134

Generates sound of a vintage steam engine. Adjustable "speed" and volume. Great for model railroads, radio plays, stage, or as a gadget. With "steam whistle" push-button.

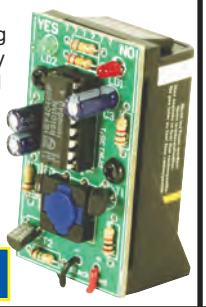


$12.95

Requires one (1) "9V" battery.

Electronic Decision Maker
MK135

Helps making difficult YES or NO decisions. Ideal for the indecisive. Simply push the button to start flashing of YES/NO LEDs. Flashing speed gradually decreases and finally one LED remains lit.



$6.95

Requires one (1) "9V" battery.

Super Ear Amplifier
MK136

Stereo audio amplifier boosts sound 50 times. Great for the hearing impaired (e.g. when watching TV), as a gadget, science project, etc. With volume control and on/off switch.

Requires three (3) "AA" batteries & stereo headset.

$12.95

IR Remote Checker
MK137

The easy way to check your IR remote for proper operation. Simple operation : point the remote at the sensor and push any button. 4 flashing LEDs indicate remote operation.

$6.95

Requires one (1) "9V" battery.

Clap On/Off Switch
MK139

Operate your lighting with a simple handclap. Ideal for disabled or elderly people.

$19.95

SMD Happy Face
MK141

Ideal introduction into SMD (Surface Mounted Device) Technology. Miniature-size gadget, 2 LEDs flash alternately, great as attention grabber.

$11.95

Requires one (1) "3V" Li button cell.

Halloween Pumpkin
MK145

25-LED bright-colored pumpkin-shape Halloween gadget. Random flash effect simulates flickering candle. One (1) extra high intensity yellow LED illuminates the pumpkin; on/off switch.

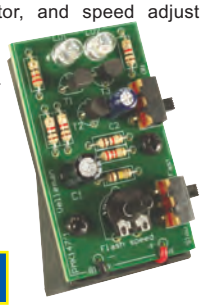
$13.95

Requires one (1) "9V" battery.

We can special order products from www.vellemanusa.com not shown here for you! Just call or e-mail for a quote.

Dual White LED Stroboscope MK147

Two super bright white LEDs, powerful flash effect, great for parties, in scale models, to observer moving parts, slow/fast selector, and speed adjust trimmer, speed adjustable between approx. 1 to 60 flashes per second.

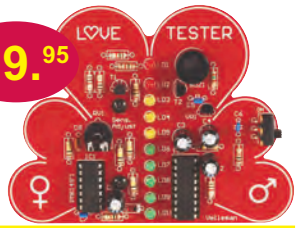


$11.95

Requires one (1) "9V" battery.

Love Tester MK149

Check your love life! Each partner holds one end of the PCB, then they join hands, and watch the meter go! 10-LED readout plus audible "love-level" indication. Flashing LEDs indicate you're a red-hot lover.



$19.95

Requires one (1) "9V" battery.

Digital LED Clock MK151

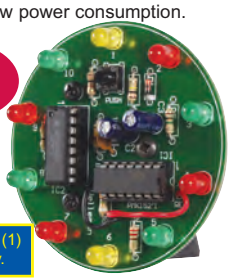
Clock with red 7-segment displays in attractive enclosure. Automatic time base selection (internal or net-frequency controlled 50/60Hz). Internal time base with fine-tuning adjustment. 12 or 24 hour mode for the time display. Runs on 9V supply (not included).

$34.95

Requires three (3) "AA" batteries for back-up.

Wheel of Fortune MK152

10-LED wheel of fortune. Push the button to start spinning action. Spinning speed gradually decreases, finally it stops and one LED remains lit. Auto power-off. Low power consumption.



$8.95

Requires one (1) "9V" battery.

Magic Message MK155

Amaze your friends: wave the wand to make the message appear. The message seems to be floating in the air! Lots of built-in messages and enter your own 7-character message. Applications: novelty gadget, in emergencies, at concerts or TV-shows, to welcome people, etc. Excellent visibility due to high intensity red LEDs. Low power consumption. Auto power-off.

$19.95

Requires two (2) "AAA" batteries.

Flickering Electronic Candle Kit MK167

Cannot be blown out by the wind! Safe for kids and pets. Great at home, for parties, Xmas, Halloween, etc.
Choose between 3 different modes: realistically flickering flame, steady flame, fade in - fade out.

$11.95

Requires one (1) CR2032 3V battery.

60 LED Multi-Effect Star MK170

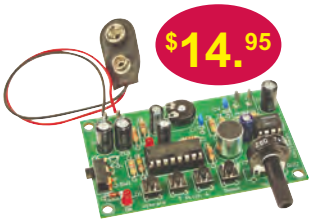
Processor-controlled LED star creates multiple dazzling effects. Extra LEDs included, allowing different color combinations: make your own mix of red and yellow LED's or make the star fully red or yellow. Sequencing is possible.

$34.95

Requires one (1) "9V" battery.

Voice Changer MK171

Make you voice sound like a robot. Add vibrato effect. "Pitch" buttons make your voice sound lower or higher. Built-in microphone and power amplifier with volume control, just add a speaker.

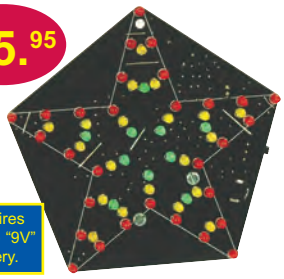


$14.95

Requires one (1) "9V" battery.

Sound Star MK172

60 LED star. Responds to sound and music in a "VU-meter" fashion. Built-in microphone, adjustable sensitivity.
Operates on 9-12VDC, 200mA.

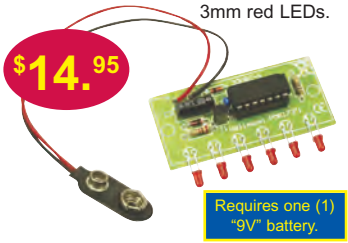


$25.95

Requires one (1) "9V" battery.

Mini 6-LED Chaser MK173

One LED scans from side to side or in one direction (selectable). Use as an attention grabber in stores, at exhibitions, etc. Applications: toys, scale and RC models, as gadget, for stage, plays, movies, etc. Six high-intensity 3mm red LEDs.



$14.95

Requires one (1) "9V" battery.

Voice Recording/ Playback Module MK195

Record time between 10 and 35 sec. (adjust the sample rate). Onboard microphone. Using the speed adjust a "funny voice" can be created.

$29.95

Requires one (1) "9V" battery.

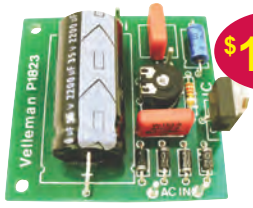
Universal Mono Pre-Amplifier K1803

This kit has been developed as a pre-module for a number of audio applications where there is an insufficient input signal.
Applications as a microphone pre-amplifier or for level correction.

$12.95

1A Power Supply K1823

This small power supply provides a regulated voltage, adjustable between 1.5 and 35V at 1A. With the LM317 regulator remarkably better ripple and regulation characteristics are given than with conventional regulators. Current limiter and thermal overload protection are included in the IC. Supplied without heatsink.



$15.95

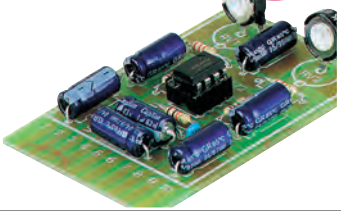
Universal Stereo Pre-Amplifier K2572

This kit has a frequency range of 40Hz to 30kHz (–dB), 40dB gain with 40dB maximum adjustable gain. It has a maximum input voltage of 50mVrms and an output impedance of 1kW.

$19.95

Universal Start/Stop Timer K2579

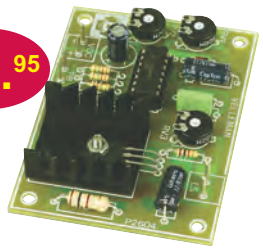
Miniature timer for all applications requiring a delay of up to 60 minutes. The control range may be adjusted.



$16.95

Police Siren K2604

Enter the world of amazing electronic sounds and noises. Create or imitate sirens of all kinds by adjusting 3 trimmers. Powerful sound with a 2W amplifier on the PCB.



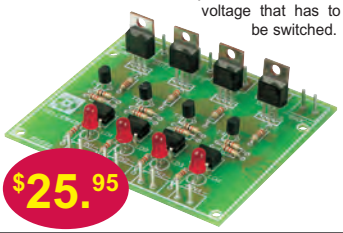
$17.95

More models and specifications on our website www.cs-sales.net.

Quad Triac Switch Card

K2634

Relays are usually used to switch AC voltages by means of an electronic control because of their simplicity. However, when switching occurs too frequently or too quickly the life time of the contact points is shortened considerably. This can be solved perfectly by replacing the relays with a triac. Using optocouplers, the entire interface network remains electrically isolated from the voltage that has to be switched.

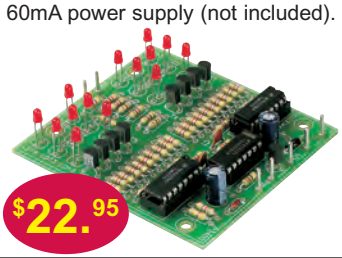


$25.95

Dual Electronic Dice

K3400

At your choice you can play with one or two dice. Displays are switched off automatically after 30 seconds to save battery power. Requires 8 to 12V DC or 6V AC / 60mA power supply (not included).



$22.95

7W Mono Audio Amplifier

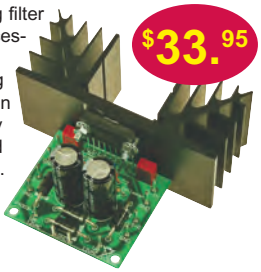
K4001

This small amplifier is constructed around the TDA2003 IC, capable of delivering 4Wrms at 4ohms. The IC is completely thermally and short-circuit protected. A conventional direct current can be connected as supply.

$18.95

2 x 30W Audio Power Amplifier K4003

This small amplifier is constructed with the TDA2616 IC, with a maximum supply of 2 x 15Wrms (4W) or 2 x 10Wrms (8W). The IC is thermally and short-circuit protected. Additional rectifier and smoothing filter are unnecessary, as alternating current can be directly connected to the unit.



$33.95

Guitar Headphone and Preamplifier

K4102

An electric guitar cannot be connected to just any amplifier or audio installation. This pre-amplifier has been designed for this purpose and provides you with a headphone output, allowing you to practice without disturbing others. Moreover, it is fitted with a special device for tone adjustment, allowing anyone to create their personal sound.

$39.95

Requires one (1) "9V" battery.

Pink Noise Generator

K4301

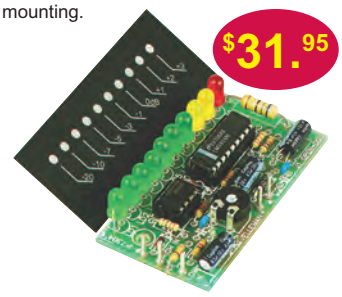
To analyze the acoustic properties of a room (usually a living room), a good pink noise generator together with a spectrum analyzer is indispensable. Moreover, a microphone with as linear a frequency characteristic as possible (from 20Hz to 20kHz) is needed. If you have an equalizer available, then the response can not only be checked but also corrected. Easily adapted to produce "white noise".

$22.95

Mono 10 LED VU Meter

K4304

VU meter with a scale consisting of 10 LEDs and an adjustable input. Dot or bar indicator. Supplied with 1 front panel suitable for horizontal or vertical mounting.

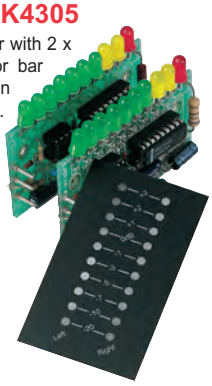


$31.95

Stereo VU Meter 2 x 10 LEDs

K4305

Stereo VU meter with 2 x 10 LEDs (dot or bar indicator) and an adjustable input. Included in package: One front panel suitable for horizontal or vertical mounting.



$36.95

Precision Stereo VU Meter 2 x 15 LEDs

K4306

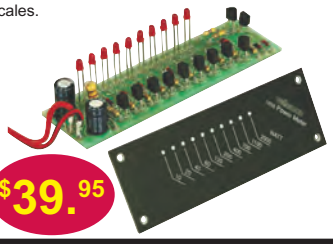
Stereo VU meter with 2 x 15 LEDs (dot or bar indicator) and an adjustable input. Included in package: One front panel suitable for horizontal or vertical mounting.

$64.95

Audio Power Meter

K4307

10 LED scale, up to 2000Wrms power measurements. Does not need a special power supply, because it is supplied directly from the speaker output. Ideal for car audio systems and PA systems. Also usable for bridged amplifiers. The unit can be used both horizontal and vertical. The kit comes with a front panel and four attractive front stickers, for the different scales.



$39.95

Light Computer

K5201

Sixteen different programs and seven outputs make this light computer a unique showpiece. This kit can find applications in party lighting, discotheques, advertisement lighting, signaling, etc. To be able to view the programs directly, each output is provided with a LED. The complete circuit can be installed so that all operations and LEDs are available from the front panel.

$69.95

Stroboscope

K5300

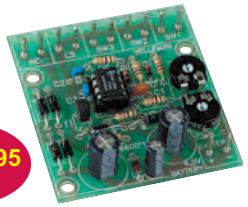
Flashing strobe light effects for discos. Make your own snapshots and "lightning" light effects. Flash frequency adjustable from 2 to 20Hz. 110V-120V AC.

$29.95

Multitone Chime

K6600

Electronic tones can be generated simply and cheaply using the device. This kit is primarily intended for use as a replacement for the traditional mechanical doorbell. Of course, it can also be used for many other types of applications.



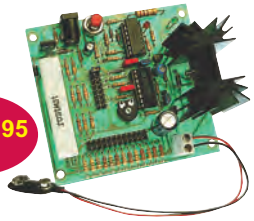
$29.95

Requires three (3) "AA" batteries.

Universal Charger

K7300

Many battery chargers are available on the market, but few of them are universal chargers. Using our kit, NiCd and NiMH batteries or different can be charged both quickly (52 minutes) and normally (14 hours). In order to ensure that the battery is fully discharged prior to charging and thus has a longer life cycle, an automatic discharger is also fitted.



$29.95

Symmetric 1A Power Supply

K8042

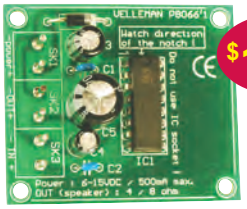
Low cost universal symmetric power supply - just add a suitable transformer and a heatsink. Ideal for e.g. op-amp applications, amplifiers, etc. Trimmers can be replaced by potentiometers to allow continuous adjustment of output voltage. LED output indicators. Compact size.

$19.95

3W Mono Amplifier

K8066

Small but powerful amplifier suits a wide range of applications such as : microphone amp, doorbells, melody generators, intercoms, sound effects, earphones, radio receivers, PC sound card, musical instruments, etc.



$15.95

We can special order products from www.vellemanusa.com not shown here for you! Just call or e-mail for a quote.

Ages 12 & up

ELENCO® RADIO KITS W/ TRAINING COURSES

(All require soldering assembly)

THESE RADIO KITS MAKE EXCELLENT PROJECTS FOR CLASSROOM STUDIES

The unique design of these kits allows you to place the parts over its corresponding symbol in the schematic drawing on the surface of the printed circuit board during assembly. This technique maximizes the learning process while keeping the chances for an assembly error at a minimum.

All kits include an assembly, lesson and theory of operation manual. The actual assembly is broken into simple sections. Each section should be completely tested before moving on. This reduces difficult troubleshooting associated with many similar kits. Each kit includes a practical hi-tech PC board with the schematic printed on the surface. The manuals are easy to understand and each radio kit PC board has been designed so that no cabinet is necessary. A special molded plastic base provides the necessary support to use the radio in any location, displaying the work achievement of the student.

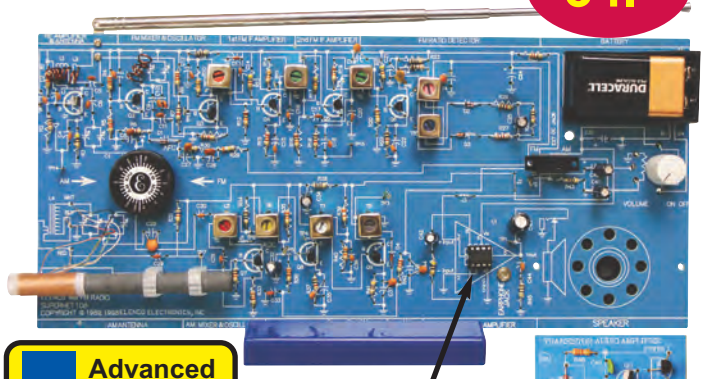
AM/FM Radio Kit and Training Course

Model AM/FM-108CK

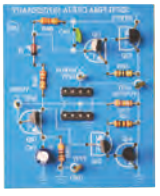
1 Integrated Circuit, 14 Transistors, and 5 Diodes

Training course of 56 pages is divided into 9 lessons; Audio Amplifier, AM Detector, AM IF, AM Amplifier, AM Mixer & Oscillator, FM Detector, 1st FM IF, 2nd FM IF, FM RF Stages. "Superheterodyne" designed to receive standard AM (amplitude modulation) and FM (frequency modulation) broadcast frequencies. New transistor module allows you to switch between the modern integrated circuit (IC) technology and the original transistor technology. Includes radio mounting stand.

$34.95



Advanced



PC Board Dimensions:
Main: 5 1/4" (H) x 11 5/8" (W)
Module: 2 3/8" (H) x 2" (W)

Requires one (1) 9V battery.

WEAR SAFETY GLASSES

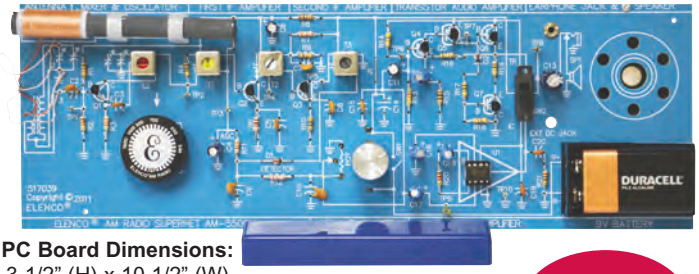
see page 65

AM Radio Kit and Training Course

Model AM-550CK

1 Integrated Circuit, 7 Transistors, and 2 Diodes

Training course divided into 5 lessons: Audio Amplifier, Detector, IF Amplifier, Oscillator, and Mixer - integrated circuit technology now included. "Superheterodyne" designed to receive standard AM (amplitude modulation) broadcast frequencies. Includes radio mounting stand.



PC Board Dimensions:
3 1/2" (H) x 10 1/2" (W)

$24.95

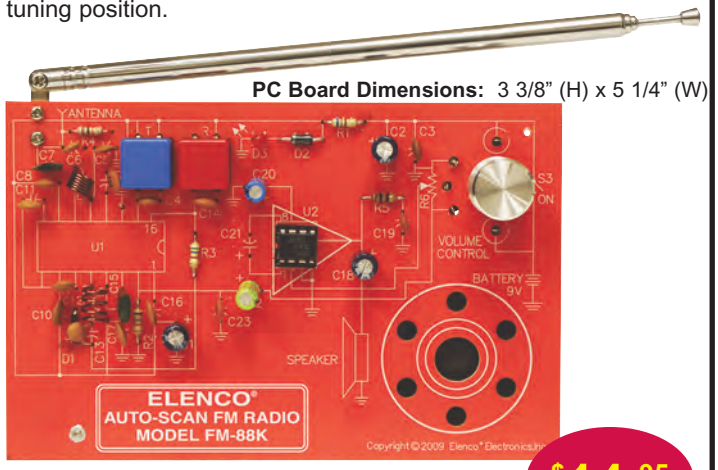
Requires one (1) 9V battery.

Intermediate

Two IC FM Radio Kit

Model FM-88K

The ELENCO® FM-88K Kit is a monophonic, two-IC, FM (frequency modulation) receiver designed to receive FM signals in the frequency range (88-108MHz). It uses electronic auto-scan to search for FM stations. This scan system is done with two button switches - one switch scans up, the other resets to the start of the tuning position.



PC Board Dimensions: 3 3/8" (H) x 5 1/4" (W)

Requires one (1) 9V battery.

Intermediate

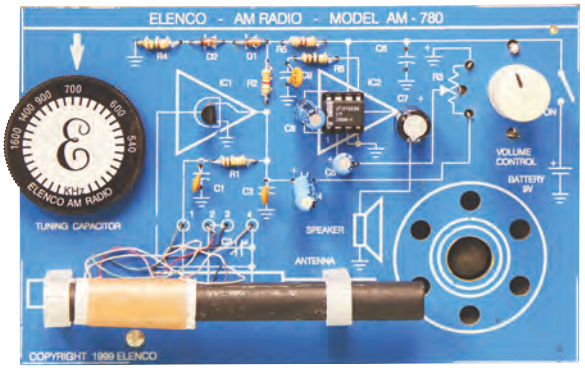
$14.95

Two IC AM Radio Kit

Model AM-780K

New Design - Easy-to-Build complete radio on a single PC board. Unique design allows you to place parts over its corresponding symbol on the PC board. Teaches the basic theory of AM radio operation.

Detailed instructions and illustrations make it an easy and educationally sound project.



PC Board Dimensions: 3 7/16" (H) x 5 5/16" (W)

Requires one (1) 9V battery.

Intermediate

$14.95

Ages 12 & up

ELENCO® POWER SUPPLY KITS Made in U.S.A.

(All require soldering assembly)

Ideal as school projects for breadboarding, prototyping, and training. The regulated supplies are protected against damage from short circuits. **Download the manuals from our website www.cs-sales.net.**

Power Supply Kit

Model XP-720K with Training Course

$79.95

Model **XP-720K** has 3 fully regulated DC supply outputs, two outputs are continuously variable and one is fixed, plus a 12.6VAC output center-tapped to 6.3VAC.

Specifications

Input Voltage	120VAC
Output Voltage	1) 1.25VDC - 15VDC @ 1A 2) –1.25VDC - –15VDC @ 1A 3) 5VDC @ 3A 4) 6.3VAC @ 1A & 12.6VAC center-tapped @ 1A It features short circuit protection on all supplies.

Note: Variable outputs can be stacked to get 3 - 30VDC @ 1A.

Available Assembled Model XP-720 $99.95 - See page 60.

Variable Voltage Power Supply Kit

Model XP-15K with Training Course

A handy portable power supply with a variable output voltage of 15VDC. Mounted in a ventilated plastic case.

Specifications

Input Voltage:	120VAC
Output Voltage:	0 - 15VDC
Output Current:	0.5A @ 8V; 0.3A @ 12V; 0.2A @ 15V
Short Protected IC Thermo	

$24.95

Variable Voltage Power Supply Kit

Model K-11 with Training Course

A low cost way to supply voltage to school projects. For breadboarding, prototyping, and training.

$19.95

Ideal for School Projects!

Specifications

Input voltage:	120VAC
Output voltage:	0 - 15VDC @ 250mA AC: 8.5V @ 500mA

Ages 12 & up

ELENCO® DELUXE EDUCATIONAL KITS

(All require soldering assembly)

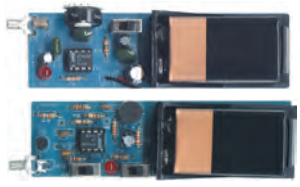
Fiber Optics Voice & Data

with Training Course

FO-30K

$19.95

Learn the basics of fiber optics communications while you build this exciting kit. Transmit your voice or a 1kHz signal through the fiber optic cable to a fiber optic receiver. Comes complete with all of the necessary components, including PC boards, microphone, speaker and fiber optic cable. Transmitter and receiver are on separate boards, Includes 3 ft. of fiber optic cable.



Requires one (1) 9V battery.

Digital Roulette

with Training Course

Model AK-300

$19.95

The Digital Roulette will be a sure winner with you, your friends and your relatives. Thirty-eight LEDs are arranged in a five inch diameter circle.

Requires one (1) "9V" battery.

Motion Detector Kit

with Training Course

Model AK-510

$19.95

Learn the basics of motion detector technology while building this motion detector kit that uses an infrared sensor. Use as a burglar alarm, message minder, room detector, or entry to home or business.

Requires one (1) 9V battery.

Ages 12 & up

ELENCO® MULTIMETER KITS

(All require soldering assembly)

If you are using or planning to use a digital or analog meter in your training programs, consider one of the meter kits below - easy construction, detailed assembly manuals. **Download the manuals from our website www.cs-sales.net.**

Deluxe Full Function Digital Multimeter Kit

with Training Course Model M-2666K

Features

- Extra large 1", 3 1/2 digit display
- Transistor tester
- Overload protection
- Capacitance to 200mF
- Diode test
- Audio continuity
- AC/DC current to 20A
- Low battery indication
- Rubber holster
- Tilt stand
- Safety input sockets & test leads.

$39.95

Advanced

Specifications

AC + DC Volts Accuracy	200mV, 2V, 20V, 200V, 1,000VDC, 750VAC DC: ±(0.5% rdg + 2dgt), 1,000V: ±(0.8% rdg + 2dgt) AC: 200mV, 750V: ±(1.5% rdg + 2dgt), 2V-200V: ±(1.0% rdg + 2dgt) Resolution 100mV
AC + DC Current Accuracy	200mA, 2mA, 20mA, 200mA, 20A DC: 200mA-20mA: ±(1.5% rdg + 2 dgt), 200mA: ±(2.0% rdg + 2 dgt), 20A: ±(2.5% rdg + 3 dgt) AC: 200mA-20mA: ±(1.0% rdg + 3 dgt), 200mA: ±(1.5% rdg + 3 dgt), 20A: ±(2.0% rdg + 3 dgt) Resolution 0.1mA
Resistance Accuracy	200W, 2kW, 20kW, 200kW, 2MW, 20MW 200W: ±(1.0% rdg + 2 dgt), 2kW - 2MW: ±(0.8% rdg + 3 dgt), 20MW: ±(2.0% rdg + 4 dgt) Resolution 0.1W
Capacitance Accuracy	2nF, 20nF, 200nF, 2mF, 20mF, 200mF 2nF - 20mF: ±(2.5% rdg + 3 dgt), 200mF: ±(5.0% rdg + 3 dgt), Resolution 1pF
Dimensions Accessories	7 1/2" (H) x 3 1/2" (W) x 1 13/32" (D) Test leads, Manual, 9V Battery included

20K/V VOM Model M-1250K

$27.95

Features

- 20,000W/V
- 23 ranges
- 3 1/2" meter
- Mirrored scale
- Audible continuity
- Checks transistors / diodes
- Safety input sockets and test leads
- 10A DC current
- dB scale
- Battery test
- Tilt stand

DSR-85
Dial Scale Reading Kit Included

Intermediate

Available assembled as Model M-1250 $25.95

Specifications

DC Volts	0.1, 0.5, 2.5, 10, 50, 250 – ±3% FSR / 1k – ±5% FSR
AC Volts	10, 50, 250 – ±4% FSR / 1kV – ±5% FSR
DC Current	50mA, 2.5mA, 25mA, 250mA – ±3% FSR / 10A ±5% FSR
Resistance	x1, x10, x100, x1k, x10k – ±3% of ARC
Transistor h_{FE} 0-1000	ICEO 15mA, 150mA
Dimensions Accessories	5 7/8" (H) x 3 23/32" (W) x 1 1/4" (D) Test leads, Manual, 9V and (2) 1.5V "AA" batteries

Digital Multimeter Kit Model M-1008K

with Training Course

Features

- Audible continuity
- 3 1/2 digit LCD
- 19 ranges
- Transistor test
- Diode test
- Overload protection
- Pocket-size

$22.95

Intermediate

Available assembled as Model M-1000E $12.95

Specifications

DC Volts AC Volts Accuracy Input Impedance	200mV, 2V, 20V, 200V, 600V 200V, 600V DC ±1/2%, AC ±2% Resolution 0.1mV 1MW
DC Current Accuracy	200mA, 2mA, 20mA, 200mA, 10A 200mA - 20mA: ±1.8% rdg + 2 digits; 200mA: ±2.5% rdg + 2 digits; 10A: ±3.0% rdg + 2 digits Resolution 0.1mA
Resistance Accuracy	200W, 2kW, 20kW, 200kW, 2MW ±1% rdg + 2 digits Resolution 0.1W
Dimensions Accessories	5" (H) x 2 7/8" (W) x 1" (D) Test leads, Manual, 9V battery

Ages 12 & up

ELENCO® TEST EQUIPMENT KITS

(All kits on this page require soldering assembly)

Function Generator Kit

Model FG-500K

with Training Course

$39.95

Provides sine, square or triangle waveforms continuously variable 1Hz to 1MHz. Amplitude adjustable to 3V peak-to-peak. Complete with all parts, PC board, schematic, deluxe case and extensive assembly manual.

Requires one (1) 9V battery.

Specifications

Output

Waveforms: Sine, square, triangle
Frequency: 1Hz - 1MHz
Impedance: 600W ±10%
Amplitude: Sine/triangle: 0-3V
Squarewave: 8V
Frequency variable range: 10:1 or more
Frequency multiplier: Six decade steps

Sine Wave

Distortion: Less than 1% (at 1kHz)
Flatness: ±0.05dB (1Hz - 100kHz)

Square Wave

Symmetry: Less than 5% (at 1kHz)
Rise / fall time: Less than 50/30ns (at 1kHz)

Triangle Wave

Linearity: Less than 1% (up to 100kHz)
Power requirements: 9V battery

Available Assembled: Model FG-500 $54.95 - pg. 57

Learn Surface Mounting Techniques Function Generator Kit

Model FG-600K **with Training Course**

$44.95

This versatile function generator includes surface mount components such as ICs, resistors and capacitors. When completed, it provides Sine, Square and Triangle waveforms, continuously variable to 1MHz. Amplitude adjustable. Complete with all parts and PC board. Includes case and extensive training manual.

Requires one (1) 9V battery.

Intermediate

Diode/Transistor Tester Kit

Model DT-100K

$24.95

This dynamic tester allows the checking of transistors and diodes in circuit. Identifies NPN or PNP transistors. Checks all types - small or large power. Identifies anode or cathode of diodes.

Requires one (1) 9V battery.

Available Assembled Model DT-100 $39.95 - pg. 57

Multi-Network Cable Tester Kit

Model TCT-255K

This tester is a convenient instrument for testing different unshielded wiring schemed telephone cables with RJ-11 and RJ-45 connectors and coax cables (F and BNC connectors). Cables can be tested before and after they are installed.

$39.95

Features

- Testing cables before or after their installation
- Mapping function
- Cable identification (straight or cross-pinned)
- Open or short testing
- F to BNC connectors included
- Low battery indicator
- Auto power-off function (30 seconds)
- 9V battery included

(Assembly required)

Resistor Substitution Box Kit

Model K-37

$17.95

Contains 24 different value resistors from 10Ω to 1MΩ. 5%toerance, 1/2 watt.

Available Assembled Model RS-400 $27.95

Capacitor Substitution Box Kit

Model K-38

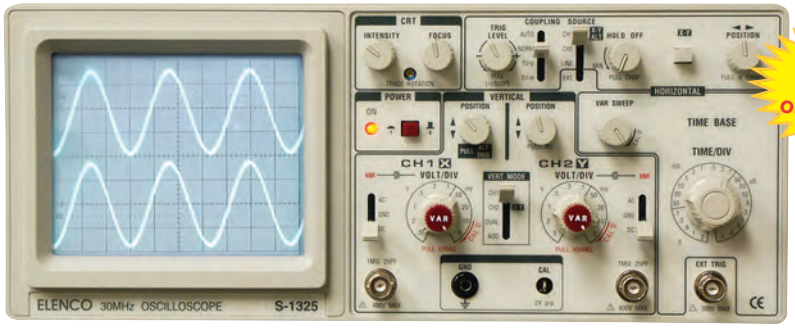
$17.95

Contains 24 different value capacitors from 100pF to 0.1mF; 50 or 100 volt.

Available Assembled Model CS-440 $27.95

ELENCO® DUAL TRACE 30MHz ANALOG OSCILLOSCOPE

Model S-1325



See more models on our website.

$495

Features

- Dual or single trace operation.
- Calibrated 23 step timebase with x10 magnifier.
- 1mV/DIV sensitivity
- AUTO/NORM triggered sweep operation with AC, TV-H, TV-V and line coupling.
- Front face dust cover included.
- 2 FREE probes (x1 & x10) included.

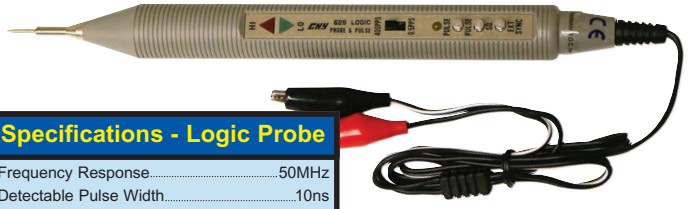
DIGITAL LOGIC AND PULSER PROBES

(Kits require soldering)

Elenco® Logic Probe & Pulser Combo

Model LP-900

A unique two-in-one logic probe & pulser that simplifies troubleshooting and analyzing digital circuits.



$31.95

Specifications - Logic Probe

Frequency Response	50MHz
Detectable Pulse Width	10ns
Logic Threshold	TTL Hi 3V, Lo 0.75V CMOS Hi 60% Vcc, Lo 15% Vcc
Input Impedance	120kW
Operating Supply Voltage	4-18V
Max. Input Protection	±70VAC/DC @ 15 s.
Power Supply Protection	±20V

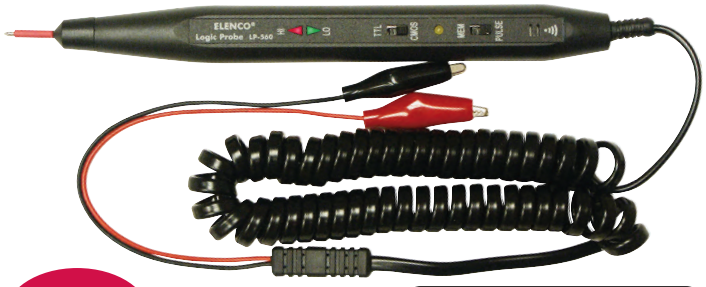
Specifications - Logic Pulser

Pulse Repetition Rate	0.5/400Hz
Pulse Width	10ms
Output Current:	
Pulser Mode @ 0.5Hz	100mA sink/source
Square Wave Mode @ 500Hz	5mA sink/source
Sync Input Impedance	1MW
Operating Supply Voltage	5-15V
Max. Sync Input Protection	±120VDC @ 30 s.
Output Protection	±35VDC @ 30 s.
Power Supply Protection	±20VDC @ 30 s.

Elenco® Logic Probe

Model LP-560

The LP-560 Logic Probe provides convenient and precise use in the measurement of logic circuits. It displays logic levels (high or low), pulses and voltage transients down to 25 nanoseconds. High intensity LED readouts provide instant response to the logic state.



$19.95

Specifications

Working voltage	4-18VDC
Frequency response	20MHz
Minimum detectable pulse width	25ns
Input impedance	1MW
Input overload protection	±220VAC/DC 15s
Supply voltage protection	±20VDC
Pulse indicator flash time	500ms
Operating temperature	32° - 122°F (0° - 50°C)

Features

- Tests all logic families (TTL, LSI, CMOS, ECT)
- Captures pulses to 25ns (20MHz)
- Audio beeper, two sounds HI and LOW
- Memory function
- Colored LED's for different functions
- Input overload protection
- Logic probe is circuit powered
- Reverse polarity protection

Velleman® Signal Tracer/Injector Kit

Model K7000

Ages 12 & up

Injector:
- 0-2.5Vrms output (adjustable)
- Output impedance: 1.5kW
- Frequency: ± 1kHz

Tracer:
- 3.5mV to 10Vrms sensitivity (adjustable)
- Gain: 40dB
- Input impedance: 50kW

$27.95

This signal tracer/injector has been designed to inject or detect a specific signal into an audio circuit in need of repair (such as amplifiers, radios, tone controls, ...) so as to detect the fault. In this way problems can be traced more easily. The signal tracer may also be used as a simple monitor or amplifier. Requires soldering.

Elenco® Logic Probe Kit

Model LP-525K

$15.95

Digital Logic Probe in kit form provides convenient and precise use in measurement of logic circuits. It displays logic levels (high or low), pulses and voltage transients down to 25 nanoseconds and a maximum input of 20MHz. Large PC board and detailed manual for easy construction. Requires soldering.

Ages 12 & up

Elenco® Logic Pulser Kit

Model LP-425K

$15.95

The Logic Pulser Kit is a desirable device in the troubleshooting of logic circuits and complements the logic probe in pulse tracing signals in complex circuits. It injects a signal directly into a circuit without having to disconnect components. It is circuit powered and has a switchable output of 0.5 or 400Hz at 100mA. Designed for easy construction. Requires soldering.

Ages 12 & up

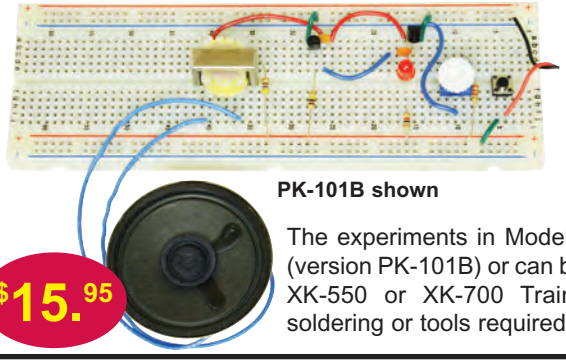
ELENCO® TRAINING COURSES AND PROTOTYPING

Basic Electronic Experiments — Model PK-101

Transforms any Standard Breadboard into an Electronic Learning Center!

72 page manual and parts included teach you:

- The basic principles of electronics.
- How to build circuits using a breadboard.
- How all of the basic electronic components work and how to read their values.
- How to read electronic schematics.
- How to design and troubleshoot basic electronic circuits.
- How to change the performance of electronic circuits by changing component values within the circuit.



PK-101B shown

$15.95

Get the 9830 board (page 54) and a 9V battery included in PK-101B. **Save $3!** $21.95

The experiments in Model PK-101 require a breadboard (version PK-101B) or can be done on the Elenco® XK-150, XK-550 or XK-700 Trainers (see pages 54-55). No soldering or tools required, over 20 parts included.

Perform 50 Experiments

- Electronic Keyboard
- Water Alarm
- Finger Touch Lamp
- Electronic Kazoo
- Battery Tester
- Magnetic Bridge
- Voltmeter
- Morse Code

*** And a Lot More! ***

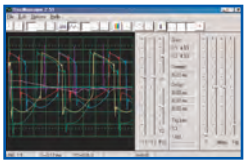
Requires one (1) 9V battery.

Basic Electronics with Computer Interface — Model PK-201

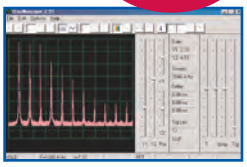
$39.95

Same as the PK-101, with the addition of computer software and cable interface for 1/8" microphone jack (breadboard not included).

Computer interface turns your PC into an oscilloscope and spectrum analyzer. See visually how oscillators and amplifiers work. Analyze your own voice on the monitor (see breadboards pages 54 and 56).



Sample Screen in Oscilloscope Mode.



Sample Screen in Spectrum Analyzer Mode.

Before You Learn Electronics, Learn About Electronic Components! — Model ECK-10

28 page manual with dozens of illustrations includes detailed descriptions of all parts, their functions in a circuit, color codes, and five self tests.

Resistors Capacitors Inductors Semiconductors Others

Over 50 Parts Come with the Course!

$11.95

Elenco® Micro-Master® Computer Interface Trainer

A Basic Computer Training Kit to Learn the Fundamentals of Computers

Model MM-8000K

$159

Starting from scratch, **you build a complete computer system**. Our Micro-Master® Trainer teaches you to write into RAMs, ROMs, and run an 8085 microprocessor. You will write the initial instructions in permanent memory in a 2816E²PROM. Teaches all about input and output ports and computer timers. Complete with 128 page lesson manual, instructions, and experiments (soldering assembly required). Case dimensions: 8" (H) x 10" (W) x 3" (D).

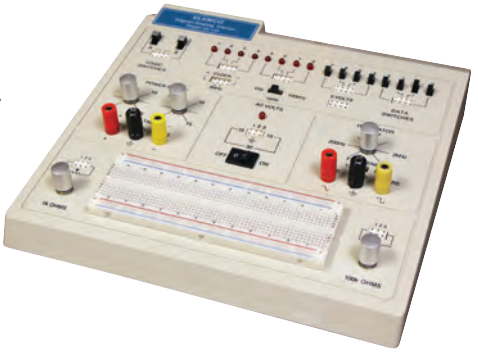
Specifications	
Digital Section	**Power Supplies**
• Eight data switches. • Two no bounce logic switches. • Eight LED readouts, buffered. • Clock frequency 1Hz, 1kHz, 100kHz, 60Hz. • Clock amplitude 5Vpp square wave.	• Variable power supply. • +1.25V to 15VDC @ 0.25A. • –1.25V to –15VDC @ 0.25A. • +5VDC @ 0.25A. • +30VAC center-tapped to 15VAC @ 0.25A.
Analog Section	**Case**
• Function generator - Sine, square wave. • Frequency adjustable in two ranges from 200 - 40kHz. • Amplitude Sine 4Vpp. • Square 12Vpp.	High impact molded case 2" (H) x 11" (W) x 11" (D). With flow-thru cooling to ventilate the power supply.
Potentiometers	**Breadboards**
• 2 undedicated potentiometers 1kW and 100kW.	• 1 breadboard, 830 tie points including two bus strips.

Elenco® Digital / Analog Trainer

Model XK-150

A low cost, full-function digital/analog trainer that meets the needs of electronic training programs. Rugged construction, can be used as fixed lab equipment or be portable.

$139



ELENCO® XK-700 DELUXE DIGITAL / ANALOG TRAINER

DELUXE COMPLETE MINI-LAB FOR BUILDING, TESTING AND PROTOTYPING ANALOG AND DIGITAL CIRCUITS

Elenco's advanced designed Digital/Analog Trainer is specially designed for school projects. It is built on a single PC board for maximum reliability. It includes 5 built-in power supplies, a function generator with continuously variable sine, triangular and square wave forms. All power supplies are regulated and protected against shorts. The trainer is mounted in a professional technician tool case made of reinforced metal with heavy-duty handles and locks. The removable, dual-sided tool pallet has many pockets and elastic retainers to hold a broad line of tools and devices. A special ramp in the case will hold the meter of your choice.

Tools in Case

Model **XK-700T** (shown in photo) is a stock trainer with tools and includes tools shown below **(meter, logic probe, & calculator shown are sold separately)**.

- **C-400** Deluxe case
- **ET-10** IC puller
- **SE-1** Solder ease kit
- **SH-1** Soldering iron holder
- **SP-4** Desoldering pump
- **SR-2B** Deluxe soldering iron
- **ST-1** Mini diagonal cutters
- **ST-2** Mini long nose pliers
- **LF-99** Lead-free solder tube
- **ST-20** Safety goggles
- **ST-30** Premium wire stripper
- **ST-75** 11 pc. screwdriver bit set
- **SW-3** Desoldering wick
- **TL-8** Precision screwdriver set

See below for detailed specifications.

- **Model XK-700 Trainer -** Available fully assembled without tools. **$229**
- **Model XK-700T Trainer -** Available with tools as shown - meter, calculator, and logic probe sold separately **(over $40 in tools only $20 more)**. **$249**
- **Model XK-700K Trainer -** Available as a kit without tools **(you build it and SAVE $40). Requires soldering.** **$189**
- **Model XK-700TK Trainer -** Available as a kit with tools as shown - meter, calculator, and logic probe sold separately **(over $40 in tools only $20 more). You build it and SAVE $40! Requires soldering.** **$209**

When ordering a meter to be used with the XK-700 Trainer, specify the PSV-50 Kit. It will provide you with the needed Velcro to hold the meter in place.

Dimensions: 13" (H) x 18" (W) x 6½" (D)

Add on PK-101 (see page 54) and get 52 experiments for your trainer!

XK-550 & XK-700 SPECIFICATIONS

Power Supplies

- Variable Power Supply
- 0V to 20VDC @ 0.5A (0V to 15VDC @ 1A)
- 0V to –20VDC @ 0.5A (0V to –15VDC @ 1A)
- +12VDC @ 1A
- –12VDC @ 1A
- +5VDC @ 1A
- +30VAC center-tapped to 15VAC @ 1A

Analog Section

- Function Generator - Sine, Triangular, Square Wave.
- Frequency adjustable in five ranges from 1 to 100kHz.
- Fine frequency adjust
- Amplitude adjust
- DC offset

Potentiometers

- 2 undedicated potentiometers 1kW & 100kW.

Digital Section

- Eight data switches.
- Two no bounce logic switches.
- Eight LED readouts, buffered.
- Clock amplitude 5Vpp square wave.

Breadboards

- 2 breadboards, each containing 830 tie points (total 1,660).

Fast Track Construction

Most of the components are on one PC board, eliminating all wires between the PC board, pots, regulators and switches. Makes assembly easier and faster, eliminates errors (K versions).

ELENCO® XK-550 DIGITAL / ANALOG TRAINER

Same trainer as XK-700, except in our molded organizer case. The tools shown with the trainer are the most commonly used in the educational field or you can make your own selection of tools and meter to go with the trainer.

Tools in Case

Model **XK-550T** (shown in photo) is a stock trainer with tools shown below **(meter shown is sold separately)**.

- **ET-10** IC puller
- **JW-140** Jumper wire kit
- **SP-4** Desoldering pump
- **ST-1** Mini diagonal cutters
- **ST-2** Mini long nose pliers
- **ST-3** Wire stripper
- **ST-5** Screwdriver slotted 3/16"
- **ST-6** Screwdriver #1 phillips
- Anti-static foam pad

see page 65

- When ordering a meter to be used with the **XK-550 Trainer**, specify a PSV-50 kit which will provide you with velcro to hold the meter in place and an anti-static foam pad that fits below the meter for storage of ICs. This is supplied **FREE** with meter order.
- When ordering tools, specify a **TM-30** tool mounting kit. When four or more tools are ordered, the tool mounting kit is supplied **FREE!**

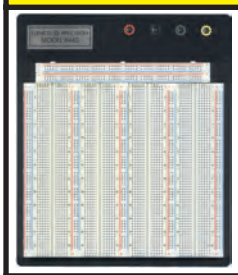
- **Model XK-550 Trainer -** Available fully assembled without tools. **$199**
- **Model XK-550T Trainer -** Available with tools as shown - meter sold separately. **$219**
- **Model XK-550K Trainer -** Available as a kit without tools **(you build it and SAVE $40). Requires soldering.** **$159**
- **Model XK-550TK Trainer -** Available as a kit with tools as shown - meter sold separately **(you build it and SAVE $40). Requires soldering.** **$179**

Dimensions: 12 1/4" (H) x 16 3/8" (W) x 5 1/4" (D)

ELENCO® BREADBOARD - PROTOTYPE DESIGN AIDS

A broad array of breadboards that provide unlimited freedom in laying out circuits and prototyping. Breadboards are arrayed from 830 tie points up to 3,220 tie points with colored binding posts that simplify identification of voltage points. Base material heavy aluminum, black anodized.

WK packages save you money!



Model 9440

Terminals: 3,220 tie points, 504 separate 5-point terminals, plus 14 horizontal bus lines.

Binding Posts: Four coded black, red, yellow, and green.

Dimensions: 8 1/4" wide • 9 1/2" long

$34.95

Model 9438

Terminals: 2,390 tie points, 378 separate 5-point terminals, plus 10 horizontal bus lines of 50 tie points each.

Binding Posts: Four coded black, red, yellow, and green.

Dimensions: 7" wide • 9" long

$29.95

Model 9480WK - 9440 breadboard with a JW-350 Jumper Wire Kit. **$43.95**

JW-350

Model 9488WK - 9438 breadboard with a JW-140 Jumper Wire Kit. **$34.95**

JW-140

Model 9433

Terminals: 1,660 tie points, 252 separate 5-point terminals, plus 8 horizontal bus lines of 50 common tie points each.

Binding Posts: Three coded black, red, and green.

Dimensions: 5 1/4" wide • 8 1/2" long

$19.95

Model 9425

Terminals: 830 tie points, 126 separate 5-point terminals, plus 4 horizontal bus lines of 50 tie points each.

Binding Posts: Three coded black, red, and green.

Dimensions: 7 1/4" wide • 3 3/4" long

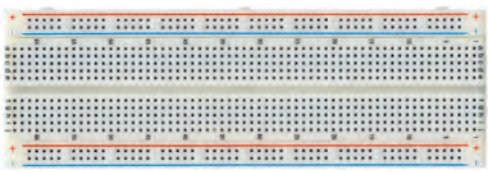
$12.95

Model 9483WK - 9433 breadboard with a JW-70 Jumper Wire Kit. **$22.95**

JW-140

Model 9485WK - 9425 breadboard with a JW-70 Jumper Wire Kit. **$15.95**

JW-70



Model 9830

$7.95

Our top quality bredblox contains 830 tie points including four independent common bus lines for easy connections to common lines. Blox have interlocking features. **Dimensions:** 2 1/8" (H) x 6 1/2" (W).

Model 9880WK - 9830 breadboard with a JW-70 Jumper Wire Kit. **$10.95**

JW-70

Jumper Wire Kits for Breadboarding

Model JW-350

Contains 350 lengths of pre-stripped , pre-formed #22 solid wire in various colors. 14 different lengths of 25 pieces each. Contained in a large 14 compartment plastic case.

Dimensions: 5" (H) x 10 1/2" (W) x 1 1/4" (D)

$12.95

$2.95 per roll

Make your own jumper wires!

Hook-Up Wire on Spools

25ft.	#22 Gauge	Solid	Standed
Black	Part #:	884410	885210
Red	Part #:	884420	885220
Yellow	Part #:	884440	885240
Green	Part #:	884450	885250
White	Part #:	884490	885290
Brown	Part #:	884400	–
Orange	Part #:	884430	–
Blue	Part #:	884460	–
Purple	Part #:	884470	–
Gray	Part #:	884480	–

Solid Hook-up Wire Kits

Model WK106

Contains six (6) 25 ft. spools of #22 gauge solid wire – red, yellow, black, white, green, and blue in a dispenser box.

$15.95

Model WK103

Contains three (3) 25 ft. spools of #22 gauge solid wire – red, yellow, and black in a dispenser box.

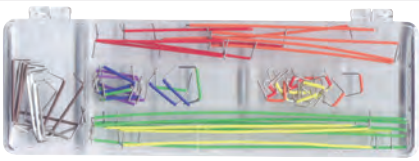
$8.95

Model JW-140

$6.95

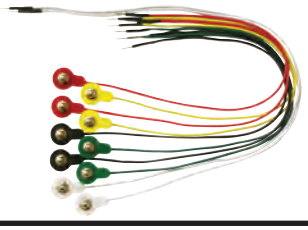
Contains 140 lengths of pre-stripped, pre-formed #22 solid wire in various colors. Contains 14 different lengths of 10 pieces each. Contained in a plastic case. **Dimensions:** 2" (H) x 6 1/2" (W) x 1/2" (D).

Model JW-70



$4.95

Contains 70 lengths of pre-stripped, pre-formed #22 solid wire in assorted colors and lengths. **Dimensions:** 2" (H) x 6 1/2" (W) x 1/2" (D).

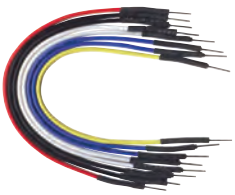


Model SCJW10

JW10 lets you connect Snap Circuits® to a breadboard. 10 wires with 10" length and unlimited possibilities!

See pages 2-10 for Snap Circuits®.

$9.95



Model JW-30

$14.95

Contains 30 pieces of reinforced, male to male jumpers - 10 pieces each of 2", 4", and 6". Assorted colors.

ELENCO® COMPONENT KITS *for the hobbyist*

NEW!

Basic Electronic Parts Kit
Model CK-1000

The Elenco® CK-1000 Basic Electronic Parts Kit includes a wide variety of basic electronic parts to satisfy almost any training project. Packaged in a handy plastic parts container with 18 compartments.

$79.95

Over 200 parts!

(listed on our website)

Color Code Calculator for resistors, capacitors, and inductors Model CC-100

Pocket-sized calculator is easy-to-use in determining values of resistors, capacitors, and inductors. Match colors and get a fast reading of values.

99¢

Carbon Film Resistor Kits

$17.95 each

5% tolerance in a cardboard organizer box.

Model RK-365

1/2 watt

365 pieces total

Model RK-370

1/4 watt

370 pieces total

Deluxe Carbon Film Resistor Kit
Model RK-485-DEL

Contains five (5) each of 73 standard values, from 1W to 1MW - 1/2 watt, 5% tolerance, carbon film - 485 pieces total. Packaged in a clear plastic case with 12 dividers.

Includes CC-100

$24.95

Resistor-Capacitor Combo Kit
Model RCK-465

$29.95

RK-365 + CAPK100

465 pieces total **Includes CC-100**

Deluxe Resistor-Capacitor Combo Kit
Model RCK-635-DEL

RK-485-DEL + CAPK150-DEL

635 pieces total **Includes CC-100**

$44.95

Capacitor Kit
Model CAPK100

$14.95

Contains ceramic disc, mylar, and electrolytic-type capacitors. 21 varieties, 100 pieces total - 30 ceramic from 10pF to 470pF, 35 mylar from 0.001mF to 0.220mF, and 35 electrolytic from 1mF to 1000mF. Packaged in a cardboard organizer box.

Deluxe Capacitor Kit
Model CAPK150-DEL

Contains ceramic disc, mylar, and electrolytic-type capacitors. 21 varieties, 150 pieces total - 60 ceramic from 2.2pF to 0.001mF, 50 mylar from 0.001mF to 0.47mF, and 40 electrolytic from 1mF to 1000mF. Packaged in a clear plastic case with 12 dividers.

$24.95

Diode Kit
Model DIOK80

$14.95

Contains an assortment of silicon, zener, germanium, bridge, and switching diodes. 80 pieces total, 20 types. Packaged in a cardboard organizer box.

Deluxe Diode Kit
Model DIOK100-DEL

Contains an assortment of silicon, zener, germanium, bridge, and switching diodes. 100 pieces total, 20 types. Packaged in a clear plastic case with 12 dividers.

$24.95

LED Assortment Kit
Model LEDK80

$14.95

Contains a variety of types and colors: Small, standard, large, rectangular, bi-color, blinking, ultra bright, red, amber, green, blue, yellow, and white. 80 pieces total, 18 varieties. Packaged in a cardboard organizer box.

Deluxe LED Assortment Kit
Model LEDK100-DEL

Contains a variety of types and colors: Small, standard, large, rectangular, bi-color, blinking, ultra bright, red, amber, green, blue, yellow, and white. 100 pieces total, 18 varieties. Packaged in a clear plastic case with 12 dividers.

$24.95

Diode / Transistor Tester
Model DT-100

Checks transistors and diodes in circuit. Identifies NPN or PNP transistors. Checks small or large power types.

You build it and SAVE! Available in kit DT-100K $24.95 pg. 52

$39.95

1% 1W Resistor Substitution Box
Model RS-500

Any value 1% resistors from 1W to 11.111MW increments.

(1 watt resistors)

$32.95

Resistor Substitution Box
Model RS-400

Contains 24 standard value resistors from 10W to 1MW, 5% 1/2W.

$27.95

You build it and SAVE! Available in kit K-37 $17.95 pg. 52

Capacitor Substitution Box
Model CS-440

Contains 24 different value capacitors from 100pF to 0.1mF, 50 or 100 volt.

$27.95

You build it and SAVE! Available in kit K-38 $17.95 pg. 52

ELENCO® DIGITAL MULTIMETERS

(See our website for complete specifications.)

Model LCM-1950 — $89.95

Features

- Large 1" 3¾ digit LCD
- Autoranging frequency to 4MHz
- Capacitance to 400mF
- Inductance to 40H
- Resistance to 4,000MW
- Diode and transistor test
- Audible continuity test
- Logic test
- Holster included

Model M-1700 — $49.95

Features

- 3½ digit, 2,000 count display
- Frequency to 15MHz
- Capacitance to 20mF
- Diode and transistor test
- Audible continuity
- AC/DC current to 10A
- 3-way overload protection
- Low cost
- Holster included

Model M-2625A — $44.95

Features

- 3¾ digit, 4,000 count display
- Frequency 10Hz to 10MHz
- Temperature to 1,292°F
- Rel. / reset mode
- Audible continuity / diode test
- Temperature probe included
- Capacitance to 4,000mF
- Auto power off
- Data hold
- Overload protection

Model CM-1555 — $39.95

Features

- Measures capacitors from 0.1pF to 20,000mF
- 3½ digit LCD readout with unit indicator
- Zero control for test lead compensation
- Banana jack and special insertion jack included
- Compact size with tilt stand and holster

Model M-1750 — $29.95

Features

- 3¾ digit, 4,000 count display
- Frequency to 10MHz
- Capacitance to 200mF
- Diode and transistor test
- Audible continuity
- AC/DC current to 10A
- 3-way overload protection
- Low cost
- Holster included

Model M-1450 — $24.95

Features

- 7 Functions / 20 measuring ranges
- 0.5% Basic accuracy
- Overload protection
- Temperature °F and °C
- Back lit display
- Data hold
- Pocket-size
- Audible continuity test

ELENCO® CLAMP METERS

(See our website for complete specifications.)

Digital AC/DC Clamp Meter

Model ST-3030

$69.95

CE/LVD
CAT III 600V

Features

- 3¾ digit, 4,000 count display
- AC/DC clamp-on meter
- Auto/manual range
- Capacitance
- Diode check/continuity buzzer
- Relative measurement
- Temperature type K
- Frequency
- Data hold
- Back light
- Auto power off
- Zippered case included
- Test leads and battery included

This meter has been designed according to IEC-1010-2-032 concerning safety requirement for handheld current clamps for electrical measurement and test.

Digital AC Clamp Meter

Model ST-1012

$29.95

Features

- 3½ digit display
- AC current to 1,000A
- AC voltage to 750VAC
- DC voltage to 1,000VDC
- Temperature type K
- Resistance to 2MW
- Audible continuity
- Data hold
- Diode test
- Zippered case included
- Test leads and battery included

This meter has been designed according to IEC-1010-2-032 concerning safety requirement for handheld current clamps for electrical measurement and test.

AC Line Splitter

Model ST-74

This instrument is a special accessory for clamp meters which can be used to measure current conveniently without destroying the insulation part of the equipment power line. Splits two-conductor line cord for reading at outlets under load. Direct and 10x sensitivity. Up to 120 VAC at 15 amps.

$19.95

ELENCO® LOW COST MULTIMETERS

Compact Multimeter

Model M-1000E

$12.95

Features

- 3½ digit, 2,000 count display
- Diode & transistor test
- Audible continuity
- 3-way overload protection
- Relative measurement

Available as a kit (M-1008K) $22.95 - See page 51

20k/V VOM

Model M-1250

$25.95

Features

- 20,000W/V
- 23 ranges
- 3 1/2" meter
- Mirrored scale
- Audible continuity
- Checks transistors / diodes
- 10A DC current
- dB scale
- Battery test

Available as a kit (M-1250K) $27.95 - See page 51

Compact VOM

Model M-105

$9.95

Features

- 10,000W/V DC, AC
- Reads volts, amps, ohms
- 15 ranges
- Pocket size
- Battery test
- Fuse protected
- Safety test leads

2 Year Warranty

ELENCO® VARIABLE VOLTAGE POWER SUPPLIES

Dual Power Supply
Model XP-770

The Model **XP-770** has 3 outputs; 2 variable (0-20V @ 2A) and 1 fixed (5V @ 3A) with input voltages of 104-127VAC (60Hz) or 207-253VAC (50Hz). Current limited and short circuit protection.

Display accuracy:
Voltage +1% +2 digits
Current +2% +2 digits
Dimensions:
10¼" (W) x 6½ (H) x 14" (D)
Weight:
12.9lbs

$299

0-50V @ 3A Power Supply
Model XP-752A

The **XP-752A** has an output of 50VDC @ 3A. Its features include fine and coarse controls for voltage and current, and contains two three-digit digital display Volt/Current meters.
The supply incorporates an externally controlled current cutoff circuit with an LED indicating current overload. Protected against short circuits and overloads.
Input 120 or 240VAC.

$169

0-30V @ 5A Power Supply
Model XP-605

The **XP-605** has an output of 30VDC @ 5A. Its features include fine and coarse controls for voltage and current, and contains two analog Volt / Current meters.
The supply incorporates an externally controlled current cutoff circuit with an LED indicating current overload. Protected against short circuits and overloads.
Input 120 or 240VAC.

$159

AC/DC Variable Power Supply
Model XP-625

The Model **XP-625** is an ideal power supply for your school lab. It has a DC output from 0-30V at up to 5A, and an AC output of 0-40V at up to 5A and 0-110V at up to 2.5A. The voltage adjust knob controls all three outputs while the volt and amp meters display the desired setting.
Output is unregulated and unfiltered.

$149

4 Fully Regulated Power Supplies in One Unit
Model XP-581A

The **XP-581A** is our most popular power supply. It is ideally suited for laboratories, classrooms, and hobbyist use. It features 3 fixed DC voltages: +5V @ 3A, +12V @ 1A, –12V @ 1A and variable DC voltage: 0V - 20V @ 2A.
Housed in a rugged steel case, it is the perfect combination of versatility and high value.

$119

3 Fully Regulated Power Supplies 12.6VAC CT @ 1A
Model XP-720

The Model **XP-720** has 3 fully regulated supplies; 1.25-15V @ 1A, –1.25 to –15V @ 1A, or (3-30V @ 1A) and 5V @ 3A. It also has 6.3VAC @ 1A and 12.6VAC center-tapped @ 1A. It features short circuit protection on all supplies.

$109

Made in USA

You build it and SAVE! Available in kit XP-720K

$79.95

Deluxe Battery Eliminator
Model XP-100

This power supply is an ideal bench top battery eliminator. Substitutes a wide variety of batteries including AA, AAA, C, D, and 9V types. The voltage is conveniently selected by a rotary switch. Advanced, solid-state electronics provide both LINE and LOAD regulation of the output voltage. The voltage selector switch is precision-designed so that the output voltage does not increase during adjustment between voltage ranges.

Made in USA

$59.95

13.8VDC, 3A Regulated Power Supply
Model XR-38

The Model **XR-38** has a regulated output of 13.8 volts @ 3A and capable of handling 5A surges up to 30 minutes. The Model XR-38 is designed to power automotive equipment such as CB radios, stereo systems, mobile two-way radios, and vehicular alarm systems when removed from the vehicle.

$54.95

Model XR-38U - 110 or 220VAC input $59.95

Variable Voltage Power Supply
Model XP-15

NEW!

A handy portable power supply with a variable output voltage of up to 15VDC. Mounted in a ventilated plastic case.

$39.95

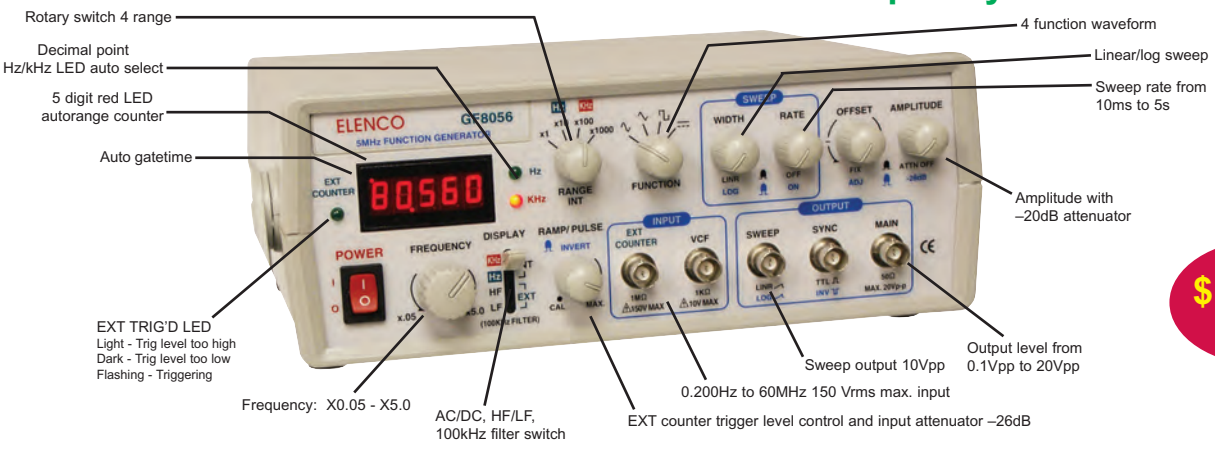
You build it and SAVE! Available in kit XP-15K

$24.95

ELENCO® AUDIO & FUNCTION GENERATORS

5MHz Sweep Function Generator

Model GF-8056 with Built-in 60MHz Frequency Counter



$329

Main Output	
Frequency range	0.5Hz to 5MHz in 8 ranges
Waveforms	4 waveforms (sine, square, triangle, DC)
Stability	0.1% for 15 minutes, 0.2% for 24 hours
DC offset	Continuously variable ±10V no load
Symmetry	50% (positive and negative half)
Linearity	<1% 1Hz-100kHz for triangle wave
Distortion	<1%, 1Hz to 100kHz
Rise / fall time	<90ns for square wave
Output impedance	50W<2% accuracy
Max. output	20Vpp no load, 10Vpp 50W load
Min. output	0.1Vpp no load, 0.05Vpp 50W load
Attenuator	X20: –26dB (±2% accuracy), X1: 0dB

Sync Output	
Output impedance	50W<2% accuracy
Output level	TTL level, >3Vpp fixed amplitude
Fanout	>20
Rise time	<60ns
VCF Input	
Input voltage	0-10V
Input frequency	DC-1kHz variance 1:1, 1:1,000
Sweep	
Output amplitude	10Vpp (no load) or 5Vpp (1kW load)
Output frequency	Continuous adjustment 0.2Hz - 100Hz
Sweep speed	10ms - 5s, continuously variable
Sweep width	1:1 - 1:100 continuously variable
Output waveform	Linear or log sweep ramp wave

Counter	
Display	5 digit 0.36" red LED display with autorange
Resolution	0.001Hz
Time base	20MHz
Accuracy	<0.002%
Max. input voltage	150Vrms
Input impedance	1MW<2%
Input frequency	0.2Hz - 60MHz
Attenuator	0dB, –26dB
Gate time	0.25s - 10s, auto-setting
Sensitivity	<30mVrms (1MHz)
General	
Power source	AC 115V / 230V +10%, 50/60Hz, 25W
Dimensions & Weight	10 13/16" (W) x 3 1/2" (H) x 11 13/16" (D) • 5 lbs. 8 oz.
Output Cable	BNC to alligator clips included.
Safety approvals	UL, CUL, GS, TUV, CE, IEC1010, EN61010

Audio Generator

Model SG-9100

$199

Specifications: SG-9100

Sine Wave	Square Wave
Frequency range: 10Hz - 1MHz (5 ranges)	**Output voltage:** ≥ 10Vpp
Frequency indicator: Dial scale	**Rise or fall time:** ≤ 0.25ns
Frequency accuracy: ±3% + 1Hz	**Symmetry:** 50% ±5% at 1kHz
Output voltage: ≥ 5Vrms (no load) ≥ 2.8Vrms (600W load)	**EXT SYNC**
Frequency response: 10Hz - 1MHz	**SYNC Range:** ±3% / Vrms
Distortion factor: 400Hz - 20kHz ≤ 0.1% 50Hz - 500kHz ≤ 0.5%	**Max. input voltage:** 10Vrms
Power: AC 115V ±15%, 50/60Hz	**Input Impedance:** 10kW±10%
	Output
	Impedance: 600W±10%
	Output attenuator: 0dB / –10dB / –20dB / –40dB / –50dB (6 ranges) (accuracy: ±1dB at 600W load)

Features

- Wide Frequency Range: 10Hz - 1MHz (5 Ranges)
- 6 Step output attenuator
- EXT SYNC Function
- Both Sine and Square Wave
- Easy Operation
- Includes BNC to red and black alligator clip cable similar to TL17

20Hz-150kHz Low Distortion Sine/Square Wave Audio Generator

Model GF-800/555

$69.95

Features

- Sine and square wave generator
- 20Hz to 150kHz in 46 steps
- Low distortion R-C oscillator
- Includes banana to clips cables
- Variable output control
- Low battery indicator
- Compact portable, lightweight

Specifications

Frequency range: x1 range 20Hz to 1.5kHz (23 steps), x100 range 2kHz to 150kHz (23 steps)
Accuracy: 20Hz through 100kHz (± 3% or less), 120kHz and 150kHz (± 5% or less)
Output control: 0dB/-20dB attenuator switch and variable amplitude control
Output impedance: approximately 600W

SINE WAVE CHARACTERISTICS
Output voltage: ≥1.2V rms at max. setting (no load)
Output flatness: (short term) 20Hz to 150kHz +0.5dB (reference frequency 1kHz)
Distortion: 200Hz - 15kHz < 0.05% 15kHz-150kHz < 0.3%

SQUARE WAVE CHARACTERISTICS
Output voltage: ≥5V p-p at maximum setting
Rise & fall time: Less than 0.5ms
Sag: Less than 5% at 20Hz (DC coupled)
Over shoot: < 2% from maximum output
Duty ratio: 50% ±5%

SYNCHRONIZATION CHARACTERISTICS
Output voltage: ≥1.2 rms (no load)
Output impedance: 1kW±5%
Other specifications same as sine wave characteristics

1MHz Function Generator

Model FG-500

Specifications

OUTPUT:
Waveforms: Sine, square, triangle
Frequency: 1Hz - 1MHz
Impedance: 600W±10%
Amplitude: Sine/triangle 0-3V
Squarewave 8V (no load)
Frequency variable range: 10:1 or more
Frequency multiplier: 6 decade steps

SINE WAVE
Distortion: Less than 1%
Flatness: ±0.5 dB 1Hz-100kHz

SQUARE WAVE
Symmetry: Less than 5% (at 1kHz)
Rise & Fall time: Less than 300ns (at 1kHz)

TRIANGLE WAVE
Linearity: Less than 1% (up to 100kHz)
Power requirements: 9V battery

$54.95

Available in Kit FG-500K $39.95
You build it and save! pg. 52

ELENCO® / WELLER® SOLDER STATIONS

Variable Temperature Soldering Stations

LED readout for greater accuracy (**SL-30** only) • Temperature range 300°F to 900°F

This hi-tech soldering station incorporates a sophisticated electronic circuit that enables the user to change the tip temperature from 300°F (150°C) to 900°F (480°C). The temperature is maintained within ±10°F of its preset temperature. The tip is isolated from the AC line by a 24V transformer. The tip is grounded to eliminate static charges. 48W iron and tip 600020 included!

Model SL30A
Digital Display
for greater accuracy

Display is centigrade or fahrenheit

$84.95

Model SL10A

$64.95

Replacement Iron
(for both models)
Model 600010
$11.95

Replacement Tips: Only $3.95 ea.

Conical - 600020 (1/32")	Wedge - 600022 (3/32")
Conical - 600021 (1/64")	Screwdriver - 600023 (3/32")

Weller® 40W Soldering Iron Station Model WLC100

$49.95

- **Replacement Iron Model SPG40** **$19.95**
- **Replacement Sponge Model WCC104** **$1.95**

Features

- ON/OFF switch with "power-on" indicator light.
- Variable power control produces 5-40 watts.
- Quality lightweight pencil iron.
- Cushioned foam grip with replaceable heating element.
- Ideal for hobbyists, DIYers and students.
- Safety guard iron holder.
- Natural sponge tip cleaning pad.
- ST3 iron plated copper tip.
- 8 ST series tips available at www.cs-sales.net
- Complete with 40W iron SPG40.
- UL listed.

Model SL-5 Series Soldering Stations

The **SL5 Soldering Station** is electronically controlled to provide 5-40 watts and is ideal for professionals, students, and hobbyists. The unit includes a holder funnel for the iron, sponge pad for cleaning the tip and an on/off switch with indicator light.
It is available assembled or in kit form so you can build it.

with iron $34.95

Get the iron for only $5 more!

Only $3.95 ea.
Extra Tips (see page 63)

Includes SR-6 40W Iron!

without iron $29.95

ASSEMBLED SOLDERING STATIONS

Model SL540 - This station comes complete with a 40-watt soldering iron providing you with variable heat - 5 watts to 40 watts. For general soldering applications.

SOLDER STATION KITS (ASSEMBLY REQUIRED)

Model SL5K40 - A solder station in **kit form** using a 40-watt soldering iron that is included to build the station. The 40-watt soldering iron then becomes part of the station.

↓ SOLDER STATIONS WITHOUT SOLDERING IRON ↓

Model SL5 is the station that comes **WITHOUT** a soldering iron. You may plug in any iron and obtain variable heat. It is suggested that you use 40-watt or 60-watt irons.

Model SL5K is a solder station in **kit form**. The soldering iron is **NOT** included. You build the station with your own soldering iron (40-watt iron suggested). Ideal for student projects.

Variable Temperature Soldering Station Model SL-75

$21.95

LOW-COST solder station features manual temperature settings.

Included iron is hard-wired to unit and NOT replaceable

Extra Tips:
SL75T2 (wedge)
SR1NT (conical)
Only $1.95 ea.

6-Pack Soldering iron tips Model TIPK-2 available
(See page 63 for more details)

Features

- Conical and wedge tips included
- 48W heater power
- Temperature range 350°F - 900°F
- Electronic temperature control
- Power on LED
- Anti-static ground output

Deluxe Temperature Controlled Soldering Station with Ceramic Heater Model ZD-931

$99.95

Ideal for applications requiring temperature stability when working with sensitive components.

$14.95

Replacement Iron 600015

Extra Tips 600020-600023 (see above)
Only $3.95 ea.

Features

- 48W ceramic heating element with temperature sensor
- Temperature range: 150°C-450°C (302°F-842°F)
- Temperature on LCD display is centigrade **ONLY**
- LCD display with digital temperature display

Quantity Discounts Available . . . CALL!

ELENCO® SOLDERING EQUIPMENT

Professional 25W Soldering Iron
Model SR-3B

$15.95

Three-wire Grounded Plug • Lightweight • Rubber sleeve • Ceramic element with long-life tip - **SR-2BT2**

Deluxe 40W Soldering Iron
Model SR-6

$12.95

Three-wire grounded plug • Screw-in tip • Rubber sleeve handle • Long-life plated tip - **SR-2BT2**

Deluxe 25W Soldering Iron
Model SR-2B

$12.95

Three-wire grounded plug • Screw-in tip • Rubber sleeve handle • Long-life plated tip - **SR-2BT2**

Replacement Tips for SR-3B, SR-6, & SR-2B

Soldering Iron Tips
Buy a 6-Pack & save!
Model TIPK-1

1/64”
3/64”
5/64”
1/16”
3/64”
7/64”

$17.95

Individually $3.95 ea.
1/8” Wedge - **SR-2BT**
3/64” Conical - **SR-2BT2**
1/64” Conical - **SR-2BT3** fine

Desoldering Pump
Model SP-4

Deluxe, high-vacuum pump with anti-static tip

$5.95

Desoldering Wick
Model SW-3

Solder removal braid removes solder from all types of connections. 5ft. roll in handy dispenser.

$1.49

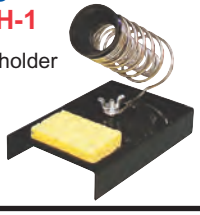
Helping Hands
with Magnifying Glass
Model HH-55

$5.95

For soldering or making fine adjustments. Adjustable arms can hold objects in any position.

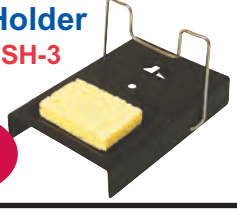
Soldering Iron Holder
Model SH-1

Soldering iron holder with sponge.



$3.95

Compact Soldering Iron Holder
Model SH-3



$3.49

Solder Tool Kit
Model ST-12

Save with this package!

$14.95

Consists of:
SR-1 - Standard soldering iron
SP-4 - Desoldering pump
SW-3 - Desoldering wick
LF-99 - Lead-free solder

Beginner Solder Tool Kit
Model ST-123

Consists of:
SR-1 - Standard soldering iron w/ stand
ST-1 - Diagonal cutters
ST-2 - Long nose pliers
ST-3 - Wire stripper
620003 - Sponge

$14.95

Standard Soldering Iron
Model SR-1N

$5.95

25W Pencil soldering iron Stand included
Conical replacement tip SR-1NT - **$1.95**

Soldering Iron Tips
Buy a 6-Pack & save!
Model TIPK-2

$9.95

3 Conical
2 Chisel
1 Flat

Fits SL-75 and SR-1N

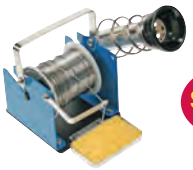
Lead-Free Solder
Model SOLD500GLF

1 lb. **$44.95**

99.3% tin, 0.7% copper
0.032 dia.
rosin core

Model LF-99 - 5 ft. **$1.95**
(same as above)

Velleman® Deluxe Soldering Iron Stand
Model STAND60



$18.95

Solder not included.

Tip Tinner, Cleaner
Model TTC-1

$8.95

Prevents oxide build-up. Prolongs tip life and heat transfer.

Dry Tip Cleaner
Model SH-1025

$10.95

Golden curls, 3.54” diameter

Golden Curls Refill
Model 556006

$3.95

Deluxe Helping Hands
with Large Magnifying Glass
Model HH-60

$11.95

For soldering or making fine adjustments. Adjustable arms can hold objects in any position.

Solder Ease Kit
Model SE-1

$2.95

4 pc. Set:
Brush, scraper, probe, and ST-23 heatsink in pouch

Heatsink
Model ST-23

$1.49

Soldering Iron Stand
Model SH-2

Small stand with flip-up wire form

99¢

ELENCO® TOOLS FOR THE ELECTRONIC INDUSTRY

Quantity Discounts Available

WIRE STRIPPERS & CUTTERS

Wire Stripper
7-in-1 all-purpose wire stripper, cutter, pliers, and crimper. Cushion grip. Strips AWG 16-26. 6" long.

$6.95

ST-30

Wire Stripper
Knife-type blade cuts, strips AWG 12-24; cushion grip, return spring. Strips AWG 10-18. 6" long.

$6.95

ST-30Y

Wire Stripper
Adjustable wire stripper, return spring, cushion grip. 5" long.

$2.95

ST-3

Diagonal Cutters
Drop forged steel, cushion grip. 6" long.

$4.95

ST-26

Mini Diagonal Cutters
Drop forged steel, return spring, cushion grip. 4 1/2" long.

$2.95

ST-1

Electrician Knife
High quality, stainless steel, large curved hawk bill blade with shackle at end. Ideal for stripping insulated electrical wires.

$6.95

ST-156

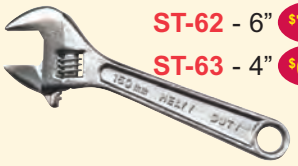
PLIERS

Adjustable Wrenches
Drop forged, chrome plated, max. jaw opening. Three sizes:

ST-59 - 8" $8.95

ST-62 - 6" $7.49

ST-63 - 4" $6.95

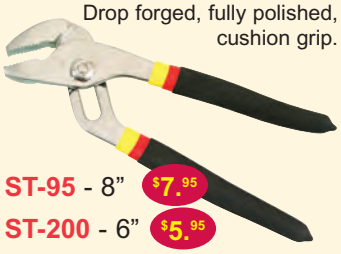


Linesman Pliers
Drop forged, fully polished, cushion grip. 8" long.

$6.95

ST-70

Locking Pliers
Drop forged, fully polished, cushion grip.



ST-95 - 8" $7.95

ST-200 - 6" $5.95

Long Nose Pliers
Drop forged steel, cushion grip. 6" long.

$4.95

ST-34

Slip Joint Pliers
Drop forged steel, chrome plated, cushion grip. 6 1/2" long.

$3.95

ST-8

Mini Long Nose Pliers
Drop forged steel, return spring, cushion grip. 5" long.

$2.95

ST-2

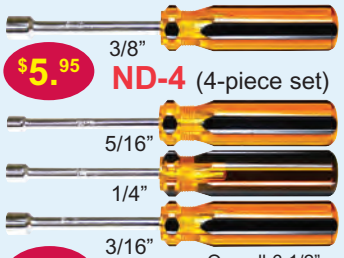
SCREWDRIVERS & NUT DRIVERS

Six Piece Precision Screwdriver Set
Swivel heads, packaged in storage case. 3 phillips and 3 slotted.

$2.95

TL-8

Nut Driver Sets
3 pc. set - 3/16", 1/4", and 5/16".
4 pc. set - 3/16", 1/4", 5/16", and 3/8".



$5.95

3/8"

ND-4 (4-piece set)

5/16"

1/4"

3/16"

Overall 6 1/2"

$4.95

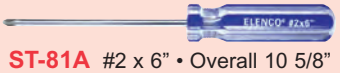
ND-3 (3-piece set)

Phillips

Magnetic Screwdriver
Shock-proof, cellulose acetate plastic handle. Chrome vanadium blade.

$2.95 ea.

ST-81 #1 x 6" • Overall 10 5/8"



ST-81A #2 x 6" • Overall 10 5/8"

Magnetic Screwdriver
Shock-proof, cellulose acetate plastic handle. Chrome molybdenum blade.

$2.95 ea.

ST-71 #1 x 6" • Overall 9 1/8"

ST-71A #2 x 6" • Overall 9 3/8"

Screwdriver
Phillips #1 x 3" chrome vanadium.

ST-6 Overall 6" $1.49

Screwdriver
Phillips #0 x 3".

$1.49

ST-101B Overall 5 1/4"

Pocket Screwdriver
Phillips #0 x 2" with clip.

$1.95

ST-11 Overall 4 1/4"

6-in-1 Driver Set
- 2 Phillips (#1 and #2)
- 2 Slotted (3/16" & 1/4")
- 2 Nut driver (5/16")

$4.95

ST-85

Slotted

Magnetic Screwdriver
Shock-proof, cellulose acetate plastic handle. Chrome vanadium blade.

$2.95 ea.

ST-82 3/16" x 6" • Overall 10 5/8"

ST-82A 1/4" x 6" • Overall 10 5/8"

Magnetic Screwdriver
Shock-proof, cellulose acetate plastic handle. Chrome molybdenum blade.

$2.95 ea.

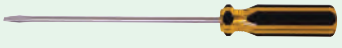
ST-72 3/16" x 6" • Overall 9 1/8"

ST-72A 1/4" x 6" • Overall 9 3/8"

Screwdriver
Slotted 3/16" x 3" chrome vanadium.

ST-5 Overall 6" $1.49

Screwdriver
Slotted 1/8" x 3".



$1.49

ST-101A Overall 5 1/4"

Pocket Screwdriver
Slotted 1/8" x 3" with clip.

$1.95

ST-9 Overall 5"

11 Piece Screwdriver Bit Socket Set

$4.95

- 3 nut drivers
- 2 phillips
- 2 slotted
- 3 star (torx)

ST-75

SPECIALTY TOOLS FOR THE ELECTRONIC INDUSTRY

Anti-Static Work Mat
Protects your work station from static discharge. Made of semiconductive vinyl. Includes grounding cord.
Size: 19" x 23"
$17.95

AS5 / WS3
AS4 / WS2 - Size: 11" x 22" $14.95

Anti-Static Wrist Strap
Protects ICs and other equipment from static discharges.

$4.95
WS-1Y / AS2
(velcro band)

WS-1 / AS3
(elastic band)

Safety Spectacles
Features wide upper frame. It can also fit over prescription glasses. (Safety approved).

$3.95
ST-22

Safety Goggles
Contours to head. Soft vinyl frame ventilated. (Safety approved).

ST-20
$2.95

Gooseneck Magnifier
Magnification: 3x
Arm length: 20.1"
(with mounting bracket)
Magnifier diameter: 3.54"
$12.95

VTMG5

PLCC Extractor
A spring-assisted extraction tool designed for the removal of PLCC's from sockets.

$2.95
VTPLCC / ST-96

IC Inserter
14/16-pin
$2.95

ET-14

IC Puller
$1.95
Stainless steel construction for removing IC's. Insulated vinyl grip.

ET-10

Head Magnifying Glass
2.2x and 3.3x.
$4.95

VTMG4

Magnifier (6x) w/ Tweezers
$3.95
2.4" Stainless steel tweezers
1.0" Ø glass

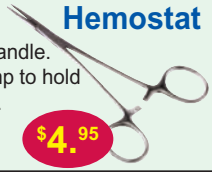
VTMG7

Folding Magnifier
Magnifier with pliable frame. Ideal for work on printed circuits.

$2.95
VTMG1

6pc. Plastic Tuning Needle Set

$5.95
VTPT

Hemostat
Straight 5" handle. Use as a clamp to hold parts in place.

ST-19
$4.95

Mini Table Vise
Metal jaws with a max. opening of 1 ½"

$5.95
VTTV3N

Lighted Magnifier
Requires two (2) "AA" batteries.

$4.95
ST-25

4 pc. Alignment Tool Set

$4.95
ST-13

Tweezers
6" straight. Insulated with blunt serrated ends.

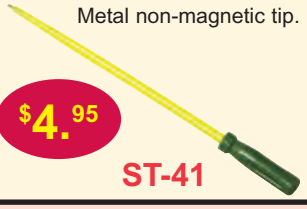
ST-17
$2.95

Pick-up Tool
Telescopic, w/ magnetic tip and mirror. Extends to 18".

$4.95
VTPMT

9 LED Flashlight
Super Bright Flash Light. Requires three (3) "AAA" batteries.
$5.95

ST-325

Deluxe Alignment Tool
Metal non-magnetic tip.

$4.95
ST-41

Tweezers Crossover
With pointed tip. 4 1/2" long.

ST-16
$2.95

Magnetic Pick-up Tool
Telescopic pick-up tool with pocket clip. Extends to 24".

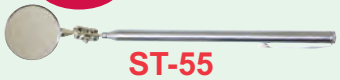
ST-45
$4.95

Pocket Flashlight
- 6" Inspection light
- Bright bulb
- Requires two (2) "AA" batteries.

ST-32
$4.95

Parts Retriever
3-prong. Pick up parts in hard-to-reach places.
$1.95

PR-3

Inspection Mirror
$3.95
All-angle, telescoping inspection mirror

ST-55

Steel Tape Rule 16.4'
graduation in cm and inches, lock button, steel, rubber housing magnetic lip
$4.95

VTRM5

Allen Wrench Set
8 pc. Inch sizes: 1/16", 5/64", 3/32", 1/8", 5/32", 3/16", 7/32" & 1/4".

$2.95
ST-15

USB Mini Vacuum Cleaner
Simply connect the vacuum to the USB port on your laptop or desktop computer. Two vacuum cleaning attachments included. No batteries required!
$9.95

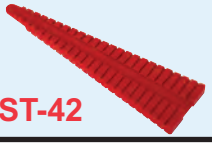
MSV-1

Precision Duster
Pressurized blaster removes microscopic dust, lint, and other particles.
Net weight: 10 oz.

$12.95
ST-49

6" Ruler
Etched metal. Inch & metric divisions with pocket clip.
$2.95

ST-14

Resistor Lead Bending Gauge
For 1/4 & 1/2 watt resistors.

$4.95
ST-42

Quantity Discounts Available . . . CALL!

ELENCO® TOOLS & TESTERS

Hex-Type Crimping Tool
Model ST-60

$24.95

For use on RG-58 and RG-59 connectors. Cushion grip. 9" long.

Multi-Function Wire Stripper
Model ST-302

$14.95

Cuts, strips RG-58, RG-59, and RG-62. Precision strips 16 to 26 gauge wire.

Coaxial Cable Stripper
Model ST-35

$15.95

Three-step coaxial cable stripper. Strips RG/U 6, 58, 59, 62 and 3C2V, 5C2V.

Round Cable Cutter
Model ST-211

$11.95

The 100 pair group cutter is rated for ethernet, 100 pair group telephone cable, and RG-174/RG-9 coax. Spring return with safety lock.

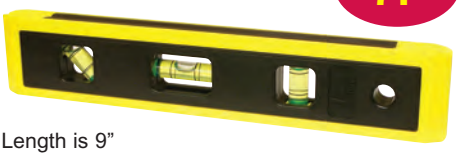
Tape Measure 25' x 1"
Model ST-149

$7.95

Inches and centimeters

Magnetic Torpedo Level
Model ST-150

$7.95



Length is 9"

AC Voltage Detector Probe
Model ST-73

$10.95

Detect AC voltages 120/240VAC without contact. Visual and audible indicators. Excellent for voltage tracing circuits.

AC Receptacle Tester w/ Built-in GFCI Tester
Model ST-38G

UL listed. Gives instant display of wiring conditions of any standard 3-wire 110VAC outlet. Also tests GFCI.

$6.95

Circuit Tester
Model ST-37

AC/DC 110-460 volts. Bright neon indicator, pocket clip, insulated case.

$3.95

ELENCO® TELECOMMUNICATION TOOLS

Ceramic Kevlar® Cutter
Model ST-340

$24.95

Easily trim Kevlar® strength member in fiber optic cable. The ceramic blades cut Kevlar® quickly and precisely.

Kevlar® is a registered trademark of the E.I. Dupont Company.

Cable Tie Gun
Model ST-375

Speeds up cable tie applications. Insures correct tension and provides automatic cutoff.

$34.95

Can Wrench
Model ST-670

$10.95

An easy-to-use tool that allows access to telephone boxes and pedestals. 3/8" and 7/16" hex double end, plastic handle.

Multi-Function Telephone Tool
Model ST-500

$34.95

Crimps, cuts, and strips.
Steel frame gives long term durability. Ratchet construction for RJ-45/11/12 modular plugs. Cushion grip. 8 1/2" long.

Modular Crimping Tool
Model ST-568

$24.95

Cuts, strips, and crimps modular plugs 8P/RJ45 and 6P/RJ12, RJ11. Cushion grip. 7 1/2" long.

Economy Crimping Tool
Model ST-560

$19.95

Multi-function telephone tool crimps, cuts, and strips for 4, 6, and 8 pole modular plugs. Plastic construction. 8" long.

Deluxe Punch Down Tool Impact Type
Model ST-630

$35.95

Extra blades $10.95 ea.

Adjustable pressure control. Suitable for 66 & 110 or KRONE terminal blocks. Includes (1) combination 66 & 88/110 blade. Storage for 1 spare blade in handle.
Replacement Blades: Type 66 (ST-601), KRONE Type (ST-603), Type 66 & 88/110 (ST-604)

Punch Down Tool
Model ST-620

$18.95

Extra blades $10.95 ea.

Non-impact tool includes (1) combination 66 & 88/110 blade. Spare blade storage in handle included.
Replacement Blades: Type 66 (ST-601), Type 66 & 88/110 (ST-604), KRONE Type (ST-603)

Punch down blade for 66& 110/88
Model ST-604

$10.95

66 & 110/88 Type Replacement Blade for ST620 and ST630

ELENCO® DATACOM TESTERS & TOOL KITS

Network Service Tool Kit

$149

Model TK-4000

A value of over $170!

A service and installation tool kit for networks, modems, and telephones. Includes quality, heavy-duty tools and a tester that will handle telephone cables with RJ-11 and RJ-45 connectors and coaxial cable with F or BNC connectors.

Includes the Following:

- **TCT-355** Phone/coax cable tester
- **ST-38G** AC receptacle tester
- **ST-35** Coaxial cable stripper
- **ST-568** Modular crimping tool
- **ST-60** Hex-type crimping tool
- **ST-75** 11 pc. screwdriver bit set
- **ST-620** Punch down tool with blade
- **ST-211** Round cable cutter
- **C-30** Parts box
- **C-200** Carrying case

Telecom Installation Service Tool Kit

$99.95

Model TK-4010

A value of over $120!

An installation and service tool kit for networks, telephones, and modems. Includes heavy-duty tool pouch and tester that will handle telephone cables with RJ11 and RJ45 connectors.

Case only Model C-190 **$15.95**

Includes the Following:

- **C-190** Tool pouch with belt
- **TCT-355** Phone / coax cable tester
- **ST-568** Modular crimping tool
- **ST-630** Punch down tool
- **ST-38G** AC receptacle tester
- **ST-85** 6-in-1 Driver set (phillips #1 and #2, slotted 3/16" and 1/4")
- **ST-1** 4 1/2" Diagonal cutters
- **ST-2** 5" Long nose pliers

Tone Generator / Probe Set

$44.95 set

Model TPG-70

The Model TPG-70 includes both TP-20 (probe) and TG-50 (generator). Technicians and installers can quickly locate wires in applications such as **TeleCom**, **Networking**, **CATV**, **HVAC**, **Electrical**, and **Automotive Circuits**.

Carrying Case Included

Probe

Features

- Use to locate termination point of all types of communication cables.
- Single or dual tone with adjustable volume.
- Audible continuity on telco and bare wires.
- LED signal confirmation.
- Probe works with any tone generator.
- Non-conductive plastic tip for safety.
- Low battery indicator.

Generator

Also Sold Separately (TP-20 Probe - $29.95) (TG-50 Generator - $29.95)

Multi-Network Cable Tester

Model TCT-355

$39.95

The TCT-355 Cable Tester is a convenient instrument for testing different shielded/unshielded wiring schemed communication cable with RJ-11 and RJ-45 connectors and BNC cable. This tester can be used for testing cables before and/or after they are installed. Testing status is indicated by multiple LEDs. Soft vinyl case provides storage for the tester, remote and terminator.

Features

- Tests RJ45 TIA568A/B (AT&T 258A), 10 Base-T, token ring, RJ11/RJ12, USOC and coaxial BNC cable.
- Automatically check cable for continuity, shorted, open and crossed wire pairs.
- Coaxial BNC cable port identifies cable conditions including shorts, shield opens, and center conductor breaks.
- Main unit and remote allow one person testing.
- Terminator and carrying case included.

Requires one (1) "9V" battery.

Cable Tester

Remote

Carrying Case

Terminator

ELENCO® ELECTRONIC TECHNICIAN TOOL KITS

Deluxe 32 pc. Technician Tool Kit
Model TK-1500

$64.95

A value of over $75!

Case Only (C-200) $14.95

Dimensions:
9" (H) x 14 3/4" (W) x 2 1/4" (D)

Includes the following

- **M-1000** Digital multimeter
- **SR-2B** Soldering iron, 25W, 3-wire grounded plug
- **SE-1** Solder ease kit (4 pcs.)
- **SP-4** Desoldering vacuum pump
- **ST-1** 4 1/2" diagonal cutters, return spring, cushion grip
- **ST-2** 5" needle nose pliers, return spring, cushion grip
- **ST-75** 11 pc. screwdriver bit set (3 nut drivers, 2 phillips, 2 slotted, & 3 star bits)
- **C-10** Parts box
- **ST-30** Premium wire stripper, cutter, pliers, & crimper. Cushion grip.
- **ET-10** IC puller, stainless steel, vinyl grip
- **SH-2** Soldering iron stand (wire form)
- **TL-8** 6 pc. precision screwdriver set
- **LF-99** Solder tube lead-free
- **SW-3** Desoldering wick
- **C-200** Case

All contained in a black vinyl zippered case with handles.

Deluxe 25 pc. Electronic Technician Tool Kit
Model TK-2000

A value of over $70!

2 Year Warranty

Case Only (C-500) $24

$64.95

Dimensions:
13 3/4" (H) x 8 1/4" (W) x 6 3/4" (D)

WEAR SAFETY GLASSES

see page 65

Tools in Case (C-500)

- **SR-2B** Soldering iron, 25W, 3-wire grounded plug
- **ST-1** 4 1/2" diagonal cutters, return spring, cushion grip
- **ST-2** 5" long nose pliers, return spring, cushion grip
- **ST-3** 5" adjustable wire strippers, cushion grip
- **SH-1** Soldering iron holder with sponge
- **SP-4** Desoldering vacuum pump
- **SE-1** Solder ease kit (4 pcs.)
- **TL-8** Precision screwdriver set (6 pcs.) in case
- **ST-5** Slotted 3/16" screwdriver, chrome vanadium
- **ST-6** Phillips #1 screwdriver, chrome vanadium
- **ND-3** 3-piece nut driver set, 3/16", 1/4", and 5/16"
- **ET-10** IC puller, stainless steel, vinyl grip
- **ST-20** Safety goggles
- **LF-99** Solder tube lead-free
- **SW-3** Desoldering wick

Deluxe 31pc. Technician Tool Kit
Model TK-1200

$59.95

A value of over $70!

All contained in a black vinyl zippered case (C-200).

Dimensions:
14 3/4" x 9" x 2 1/4"

Includes the following:

- **ET-10** IC puller
- **ET-14** IC inserter 14-16 pin
- **PR-3** 3-prong parts retriever
- **PT-1** Spare parts tube
- **SE-1** Solder ease kit
- **SH-2** Solder iron stand (wire form)
- **SP-4** Desoldering pump
- **SR-2B** Deluxe 25W soldering iron
- **ST-1** 4 1/2" Diagonal cutters
- **ST-2** 5" Needle nose pliers
- **LF-99** Solder lead-free
- **ST-5** 3/16" Slotted screwdriver
- **ST-6** #1 Phillips screwdriver
- **ST-17** Tweezers
- **ST-30** Premium wire stripper
- **ST-75** 11pc. Screwdriver bit set (3 nut drivers, 2 slotted, 2 phillips, and 3 torx bits)
- **ST-101A** 1/8" Slotted screwdriver
- **ST-101B** #0 Phillips screwdriver
- **C-200** Case

15pc. Basic Technician Tool Kit
Model TK-1350

$44.95

A value of over $55!

Case Only (C-200) $14.95

Includes the following

- **C-200** Case
- **SR-2B** Deluxe soldering iron
- **ST-1** 4 1/2" diagonal cutters
- **ST-2** 5" needle nose pliers
- **ST-30** Premium wire stripper
- **ST-5** 3/16" slotted screwdriver
- **ST-6** #1 phillips screwdriver
- **ST-101A** 1/8" slotted screwdriver
- **ST-101B** #0 phillips screwdriver
- **SP-4** Desoldering pump
- **SH-2** Soldering iron stand (wire form)
- **LF-99** Solder tube lead-free
- **ND-3** Nut driver set, 3/16", 1/4", & 5/16"

High quality tools in black vinyl zippered case.

Dimensions:
7" (H) x 13" (W) x 2" (D)

ELENCO® DELUXE ELECTRONIC TOOL KITS

Tool Kit Model TK-3000

A professional technician service tool kit in a metal reinforced tool case with heavy-duty handle and locks. A removable, double-sided pallet handles most of the tools listed below with more room for tools and parts in the lower half. A special ramp in the tool case will lock your meter of choice in place.

$99.95

WEAR SAFETY GLASSES

Tools Included in Case (C-400):

A value of over $110!

- **SR-2B** Deluxe 25W soldering iron
- **SH-1** Soldering iron holder
- **ST-1** Mini diagonal cutters
- **ST-2** Mini long nose pliers
- **ST-30** Premium wire stripper
- **SE-1** Solder ease kit (4 pc.)
- **TL-8** Precision screwdriver set (6 precision screwdrivers)
- **SW-3** Desoldering wick
- **ST-72** Screwdriver slotted 3/16"
- **ST-71** Screwdriver #1 phillips
- **ET-10** IC puller
- **SP-4** Desoldering pump
- **ST-20** Safety goggles
- **ST-9** Pocket screwdriver
- **LF-99** Solder tube lead-free
- **ST-75** 11 pc. screwdriver bit set (3 nut drivers, 2 slotted, 2 phillips, & 3 torx bits)

Case Only (C-400) $44.95

See our meters on pages 58 & 59.

Dimensions: 13" (L) x 18" (W) x 6 1/2" (D)

Tool Kit Model TK-1001

New in the electronics educational field. A professional organizer tool kit at affordable prices. No student should be without this unique tool kit that holds all of the tools you need (meter, experiments, etc.).

A value of over $85!

Tools Included in Soft Case (C-800):

- **ET-10** IC puller
- **LF-99** Solder tube lead-free
- **SE-1** Solder ease kit (4 pc.)
- **SH-3** Soldering iron holder
- **SP-4** Desoldering pump
- **SR-2B** Deluxe 25W soldering iron
- **ST-1** Mini diagonal cutters
- **ST-2** Mini long nose pliers
- **ST-3** Wire stripper
- **ST-20** Safety goggles
- **ST-75** 11 pc. screwdriver bit set (3 nut drivers, 2 slotted, 2 phillips, & 3 torx bits)
- **SW-3** Desoldering wick
- **TL-8** Precision screwdriver set (6 precision screwdrivers)
- Extra room for a multimeter (sold separately).

See our meters on pages 58 & 59

$59.95

Side pockets for extra storage

WEAR SAFETY GLASSES

Case only C-800 $34.95

Dimensions (case closed): 11" (L) x 14 1/4" (W) x 4" (D)

Electricians General-Purpose Tool Kit

Model TK-8010

$79.95

A tool kit designed for electricians and maintenance people. Includes a heavy-duty tool pouch made from tough canvas material and an adjustable quick-release belt.

A value of over $90!

Includes the following:

- **C-190** Tool pouch with belt
- **ST-36** Electricians knife
- **ST-30Y** Wire stripper
- **ST-26** Diagonal cutters 6"
- **ST-34** Long nose pliers 6"
- **ST-71A** #2x6" Phillips screwdriver
- **ST-73** Voltage detector probe
- **ST-72** 3/16"x6" Slotted screwdriver
- **ST-82A** 1/4"x6" Slotted screwdriver
- **ST-97** 10" Locking pliers
- **ST-70** 8" Linesman pliers
- **ST-38G** AC receptacle tester
- **ST-149** Power tape 25' x 1"

C-190 case, sold separately, only $15.95

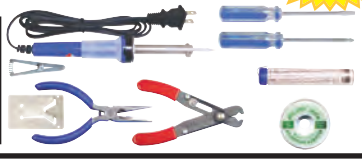
$17.95

9 Piece Electronic Technician Starter Tool Kit Model TK-14

A value of over $20!

Includes:

- **SR-1N** Standard 30 soldering iron
- **SH-2** Soldering iron stand
- **ST-2** 5" needle nose pliers
- **ST-3** Wire stripper
- **LF-99** Solder lead-free
- **ST-5** 3/16" slotted screwdriver
- **ST-6** #1 phillips screwdriver
- **ST-23** Heat sink
- **SW-3** Desoldering wick



$11.95

Hand Tool Kit Model ST-10

Includes

- **ST-1** 4 1/2" diagonal cutters
- **ST-2** 5" needle nose pliers
- **ST-3** Wire stripper
- **ST-5** 3/16" slotted screwdriver
- **ST-6** #1 phillips screwdriver

ELENCO® HVAC & ELECTRICIAN TOOL KITS

HVAC Technician Master Tool Kits

$179

Model TK-8100

C-800 case sold separately, only $34.95

2 YEAR WARRANTY ANY TOOL IN THESE KITS.

A complete tool kit for the troubleshooting of HVAC systems includes two meters for making all critical voltage, current, and temperature measurements.

Both include the following in the case shown:

- **M-2625A** Autoranging meter with temperature
- **ST-1012** Clamp meter
- **ST-95** 8" groove pliers
- **ND-3** Nut drivers 3/16", 1/4", 5/16"
- **ST-26** Diagonal pliers
- **ST-34** Long nose pliers
- **ST-71** #1 phillips screwdriver
- **ST-71A** #2 phillips screwdriver
- **ST-72** 3/16" slotted screwdriver
- **ST-72A** 1/4" slotted screwdriver
- **ST-74** AC line splitter
- **ST-73** AC voltage detector probe
- **ST-32** Inspection flashlight
- **ST-38G** AC receptacle tester

$159

Model TK-8200

C-180 case sold separately, only $24.95

NEW!

HVAC Technician Master Tool Kit

Model TK-8500

$159

Quality refrigeration/air-conditioning products and tube working tools, in a durable, portable tool bag. It features 17 pockets of variable sizes to store your tools and equipment.

Includes the following:

- **AC400-36** Gauge manifold (with hose)
- **C180** Portable tool bag
- **ST1012** Clamp meter with temperature
- **ST34** 6" Long nose pliers
- **ST20** Safety goggles
- **ST30Y** Deluxe wire stripper
- **ST59** 8" Adjustable wrench
- **ST97** 10" locking pliers
- **ST70** Linesman Pliers
- **ST85** 6-in-1 Driver set
- **ST125** 6pc. Screwdriver set
- **ST136** Ratchet wrench
- **ST137** Tube Bender
- **ST142** Mini tubing cutter
- **TK300** Tube working kit

A+ We will custom pack a tool kit to fulfill your certification program.

Deluxe 50pc. Computer Technician Service Tool Kit

Model TK-1700

A complete tool kit for the repairing and maintaining of computers and electronic devices. Included in this kit is a powerful mini vacuum with attachments and a pressurized canned-duster to remove debris or dust. OVER 50 ITEMS.

$99.95

ST-75 11 pc. screwdriver set
SH-2 Soldering iron stand
LF-99 Solder tube lead-free
SR-1 25 watt soldering iron
PR-3 Parts retriever
MSV-1 Mini vacuum with 3 attachments
ET-10 IC puller
ST-44 Anti-static wipes
C-200 Large zipper case with handles
Sold separately only $14.95.
TL-8 Precision screwdriver set
WS-1 Anti-static wrist strap
ST-32 Inspection flash light
ST-15 9 pc. allen wrench set
ST-43 10 cotton swabs
ST-49 Precision duster 10 oz.
ST-16 Crossover tweezers
C-30 Spare parts container
ST-2 Mini long nose pliers
ST-3 Wire stripper
"AA" Batteries (2)
ST-1 Mini diagonal cutters
SW-3 Desoldering wick
ST-11 #0 phillips pocket screwdriver
ST-72 #1 phillips screwdriver (9" overall)
ST-71 3/16" slotted screwdriver (9" overall)

A value of over $100!

WEAR SAFETY GLASSES

see page 65

Dimensions: 14 3/4" x 9" x 2 1/4"

Quantity Discounts Available!

ELENCO® PROBES AND TEST LEADS

Scope Probe, Switchable

Built-in 2 position switch; X1, X10, complete with accessories, 10MW input impedance. Fits all scopes with BNC connector. Compensation range 10 to 35pF. Includes minigrabber, insulating tip, adjusting tool, channel identifier clips, and IC tip. Length - 60".

$16.95 (P1E) 65MHz

$24.95 (P2E) 100MHz

250MHz Scope Probe, Switchable

P-3E

OUR BEST!

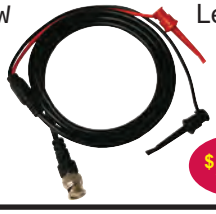
Built-in 3 position switch; X1, X10, ref. Complete with accessories. 10MW input impedance. Fits all scopes with BNC connector. Compensation range 10 to 35pF. Length - 60".

$29.95

TL-3

BNC to Minigrabber Test Lead Set

50W Length 42"



$5.95

TL-7

BNC to BNC Cable

50W RG58U Length 36"

$3.95

TL-17

BNC to Alligator Clips Test Lead Set

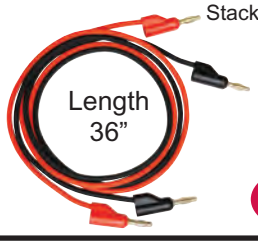
Length 48"

$5.49

TL-18

Banana to Banana Lead Set

Stackable side and back



$5.49

TL-6LG

Alligator Lead Set (10 pc.) with Large Alligator Clips

Length 36"

$8.95

TL-6

Alligator Lead Set (10 pc.) with Small Alligator Clips

$5.95

Length 14"

TL-15

Banana to Probe (w/ attachable alligator clips) Heavy-Duty Test Lead Set

Length 36"

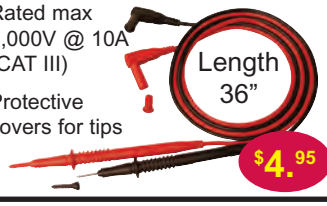
$7.95

TL-22

Banana to Probe Heavy-duty Test Lead Set

Rated max 1,000V @ 10A (CAT III)

Protective covers for tips



$4.95

TL-14

Banana to Probe (with sleeve) Test Lead Set

TL-4

Banana to Probe Test Lead Set

TL-16

Banana to Alligator Lead Set with Large Alligator Clips

TL-5

Banana to Alligator Lead Set with Small Alligator Clips

TL-21

Minigrabber to Minigrabber IC Test Lead Set (5 pc.)

Length 12"

TL-12

Banana to Minigrabber Test Lead Set

Length 36"

TL-9

Minigrabber to Minigrabber Test Lead Set

Length 36"

$5.95

TL-13

Banana to Alligator Clip Component Test Lead Set

Length 6"

TL-30

Fully Insulated Alligator Clip Adapters

Push-on to most test probes

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Educational Kits

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Probes

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www.cs-sales.net

See page 38 for coupons.

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Kit

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velleman®

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Multimeters

Clamp Meters

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100% Satisfaction GUARANTEED Lowest Prices

NEW!

SNAP CIRCUITS® MOTION

PRICE GUARANTEE MATCH

BUILD OVER 165 EXCITING PROJECTS

$84.95

CONTAINS OVER 50 PARTS

FEATURES:

- Color changing lighted fan
- Air "fountain"
- Motion Detector
- Mini car
- Crawler
- Various gears and pulleys
- And so much MORE!!

Model SCM-165

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PRICE GUARANTEE MATCH *

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facebook

Like us on Facebook® and SAVE MONEY! Visit www.cs-sales.net for details.

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SNAP CIRCUITS® LIGHT

Contains Over 60 Parts
Including:
- Infrared detector
- Strobe light
- Color changing LED
- Glow-in-the-dark fan
- Strobe integrated circuit (IC)
- Fiber optic communication
- Color organ controlled by iPod® or other MP3 player, voice, and fingers
- Pre-punched patterns for motor

Build over 175 projects
Including:
- Color Light
- Light Show
- Color Oscillator
- Triple Blinker
- R/C Blink & Beep
- PNP Amplifier

Requires four (4) "AA" batteries.

Model SCL-175
with over 175 projects

$84.95

PRICE GUARANTEE MATCH

BEST SELLER

Watch and be amazed at what your music can do with the new Snap Circuits® LIGHT®. Connect your iPod® or any MP3 player and enjoy your music as the lights change to the beat. The strobe light with spinning patterns will amaze you with its visual effects.

SNAP CIRCUITS® SOUND

Buy both and save with our SCC-350 combo see page 11

Contains over 40 parts
Including:
- Keyboard with optical theremin
- Echo effects
- Voice changer: record voice or music and play it back at different speeds
- Sound energy demonstration
- Connect to your smart phone and analyze sounds with apps.

Build over 185 projects
Including:
- Electronic Keyboard
- Light & Sound
- Voice Changer with Echo
- Audio Amplifier
- Clicker
- Water Alarm

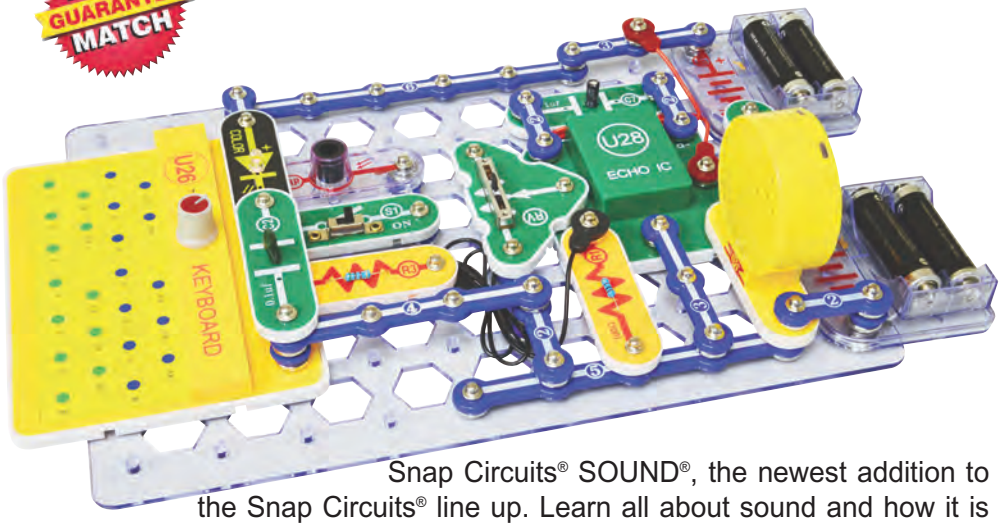
Requires four (4)"AA" batteries.

Model SCS-185
with over 185 projects

$84.95

NEW!

PRICE GUARANTEE MATCH



Snap Circuits® SOUND®, the newest addition to the Snap Circuits® line up. Learn all about sound and how it is made and heard. Build more the 185 projects to help demonstrate the principles of sound. APPS for Snap Circuits® SOUND® are available.

Ages 8 & up

ELENCO® SNAP CIRCUITS®

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

Snap Circuits® Green Alternative Energy Kit

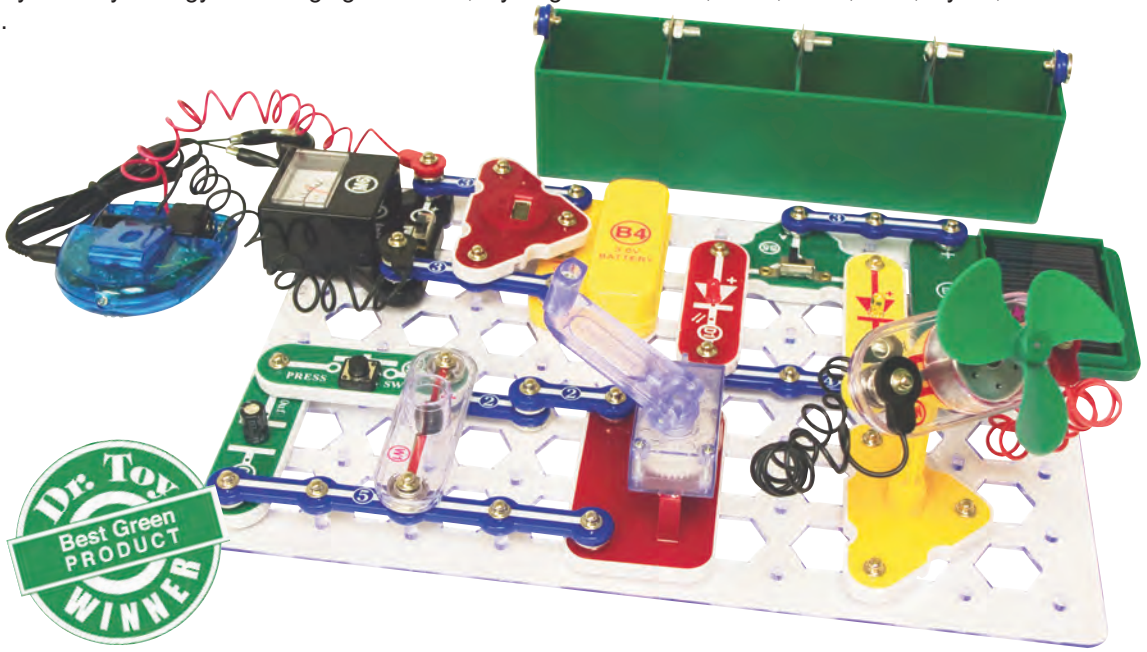
$79.95

PRICE GUARANTEE MATCH

Model SCG-125

with over 125 projects

Learn about energy sources and how to "think green". Build over 125 projects, using the flexibility of our award-winning Snap Circuits®, to have loads of fun learning about environmentally friendly energy and how the electricity in their home works. Includes full-color manual with over 100 pages and separate educational manual. This educational manual will explain all the forms of environmentally friendly energy including: geothermal, hydrogen fuel cells, wind, solar, tidal, hydro, and others. Contains over 40 parts.



Topics Covered:

- Solar Energy
- Wind Power
- Hydro Power
- Generators
- Chemical Power
- Rechargeable Batteries
- Analog Meters

Ages 8 & up

ELENCO® SNAPTRICITY®

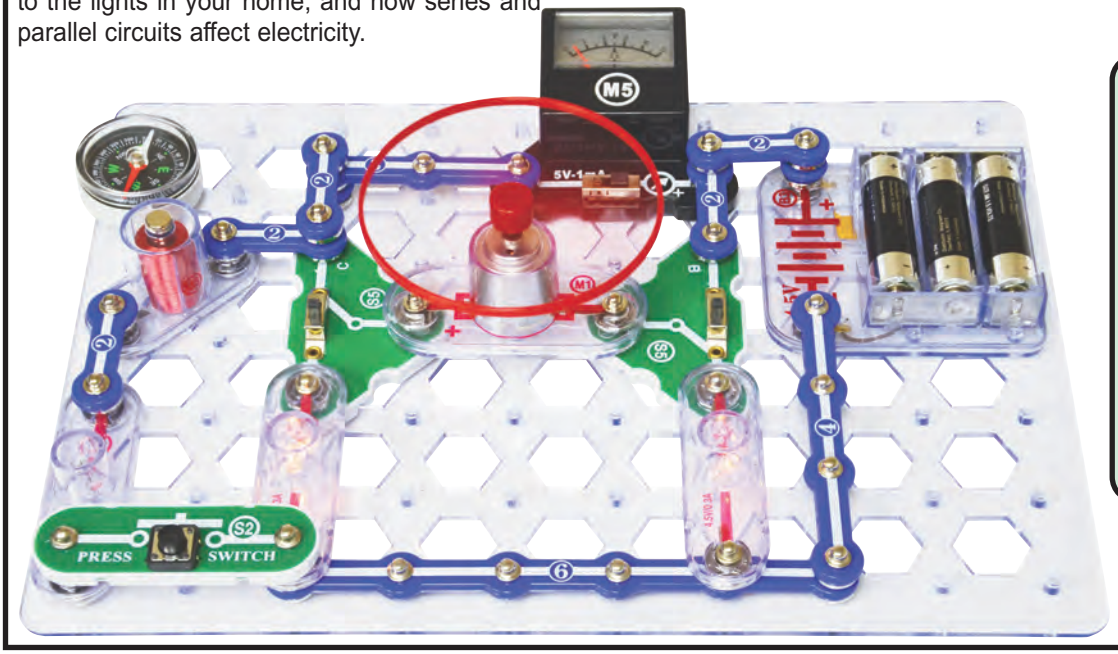
Model SCBE-75

with over 75 projects

PRICE GUARANTEE MATCH

$42.95

Learn how **electricity** and **magnetism** can be used to make each other. Learn about magnetic fields, how the electricity in your home works, how switches control the electricity to the lights in your home, and how series and parallel circuits affect electricity.



Features:

- Over 40 parts
- Includes: Meter, electromagnet, motor, lamps, switches, fan, compass, and electrodes
- Educational toy: Projects that relate to electricity in the home and magnetism and how it is used.

Requires three (3) "AA" batteries or AC adapter (see page 9).

ELENCO® SNAP CIRCUITS® EDUCATIONAL KITS

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

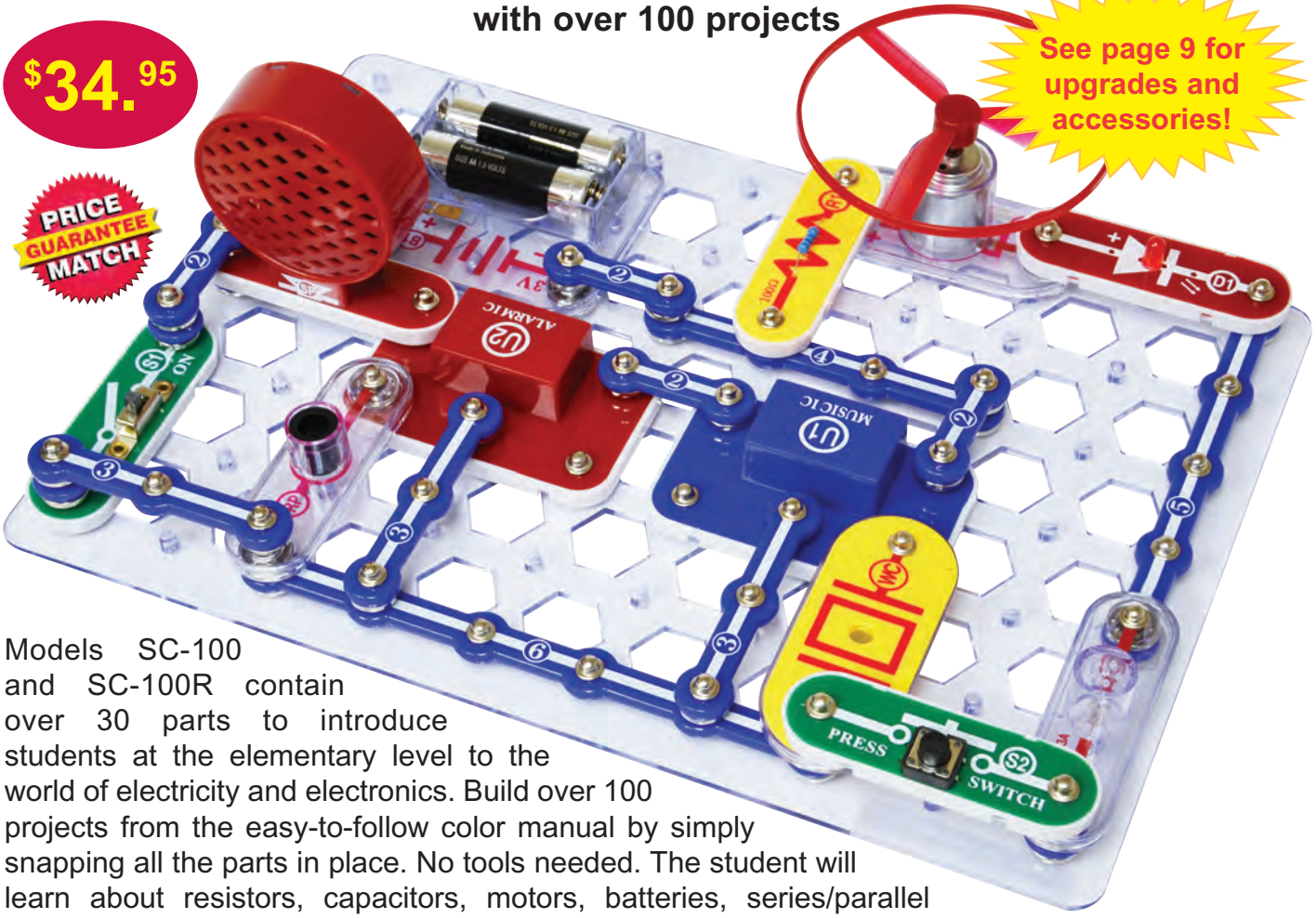
Snap Circuits® Jr. Model SC-100

with over 100 projects

$34.95

PRICE GUARANTEE MATCH

See page 9 for upgrades and accessories!



Models SC-100 and SC-100R contain over 30 parts to introduce students at the elementary level to the world of electricity and electronics. Build over 100 projects from the easy-to-follow color manual by simply snapping all the parts in place. No tools needed. The student will learn about resistors, capacitors, motors, batteries, series/parallel circuits, and much more.

Build over 100 projects

Including:

- Flying Saucer
- Spin Draw
- Sound Activated Switch
- Alarm Circuit

Contains Over 30 Parts

Including:

- Photoresistor
- Music IC
- Motor
- Space War IC

Training Program

Model SC-100R

(Same as SC-100 PLUS Case, Student & Teacher Guides, see page 9)

$54.95

PRICE GUARANTEE MATCH

This popular educational version is the same as the SC-100 with the addition of a 48-page, color enhanced learning guide.

Storage Case

Each SC-100R comes with a lightweight, durable case to store all Snap Circuits® parts.

Case included

All models on this page require two (2) "AA" batteries, or an AC adapter - see page 9

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

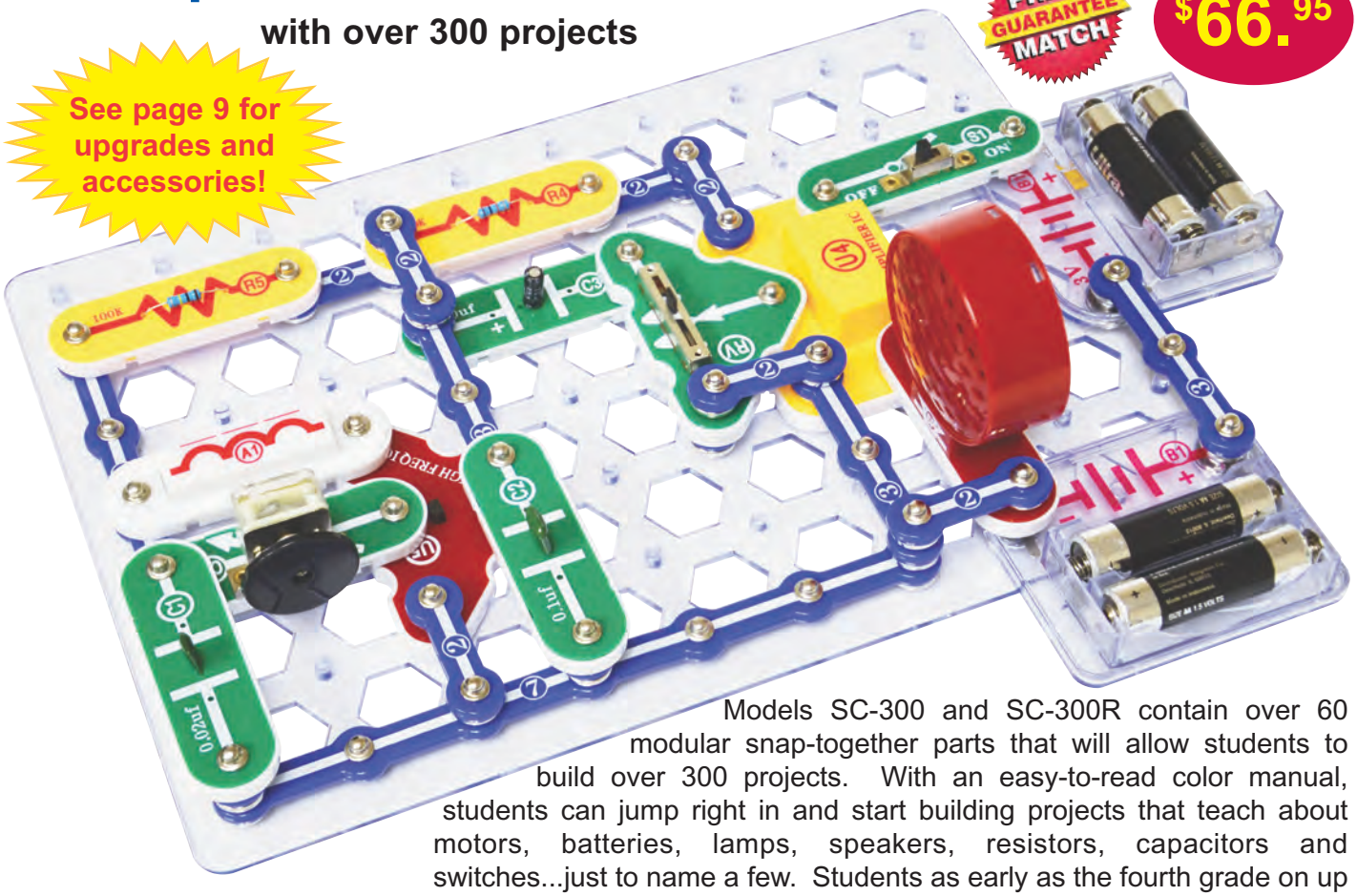
Snap Circuits® Model SC-300

with over 300 projects

PRICE GUARANTEE MATCH

$66.95

See page 9 for upgrades and accessories!



Models SC-300 and SC-300R contain over 60 modular snap-together parts that will allow students to build over 300 projects. With an easy-to-read color manual, students can jump right in and start building projects that teach about motors, batteries, lamps, speakers, resistors, capacitors and switches...just to name a few. Students as early as the fourth grade on up to high school will enjoy learning and have fun working with Snap Circuits®.

Build over 300 projects

Including:

- AM Radio
- Water Detector
- Motion Detector
- Electronic Kazoo
- Burglar Alarm
- Lie Detector
- Plus all projects contained in the 100-in-1 (SC-100)!

Contains Over 60 Parts

Including:

- Antenna Coil
- Microphone
- Power Amplifier IC
- Variable Capacitor
- Five Fixed-value Capacitors
- High Frequency IC
- Two Transistors
- Adjustable Resistor

SC-300S - Deluxe Version, same as SC-300 plus 41 bonus, computer interfaced projects. Includes CI-73.

$86.95

PRICE GUARANTEE MATCH

Training Program Model SC-300R

(Same as SC-300 PLUS Case, Student & Teacher guides, see page 9)

A value of over $140!

only

$119.95

PRICE GUARANTEE MATCH

The SC-300 Student Guide for the SC-300R includes 80 pages of educational curriculum. Written with the help of educators, the Student Guide is essential in covering all topics related to electricity and electronics being taught in middle schools and above. Includes real world applications and problem solving quizzes.

Custom Storage Case

Each SC-300R comes with a lightweight, durable case with custom foam inserts to store all Snap Circuits parts. Easy-to-identify missing components.

All models on this page require four (4) "AA" batteries, or an AC adapter - see page 9.

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

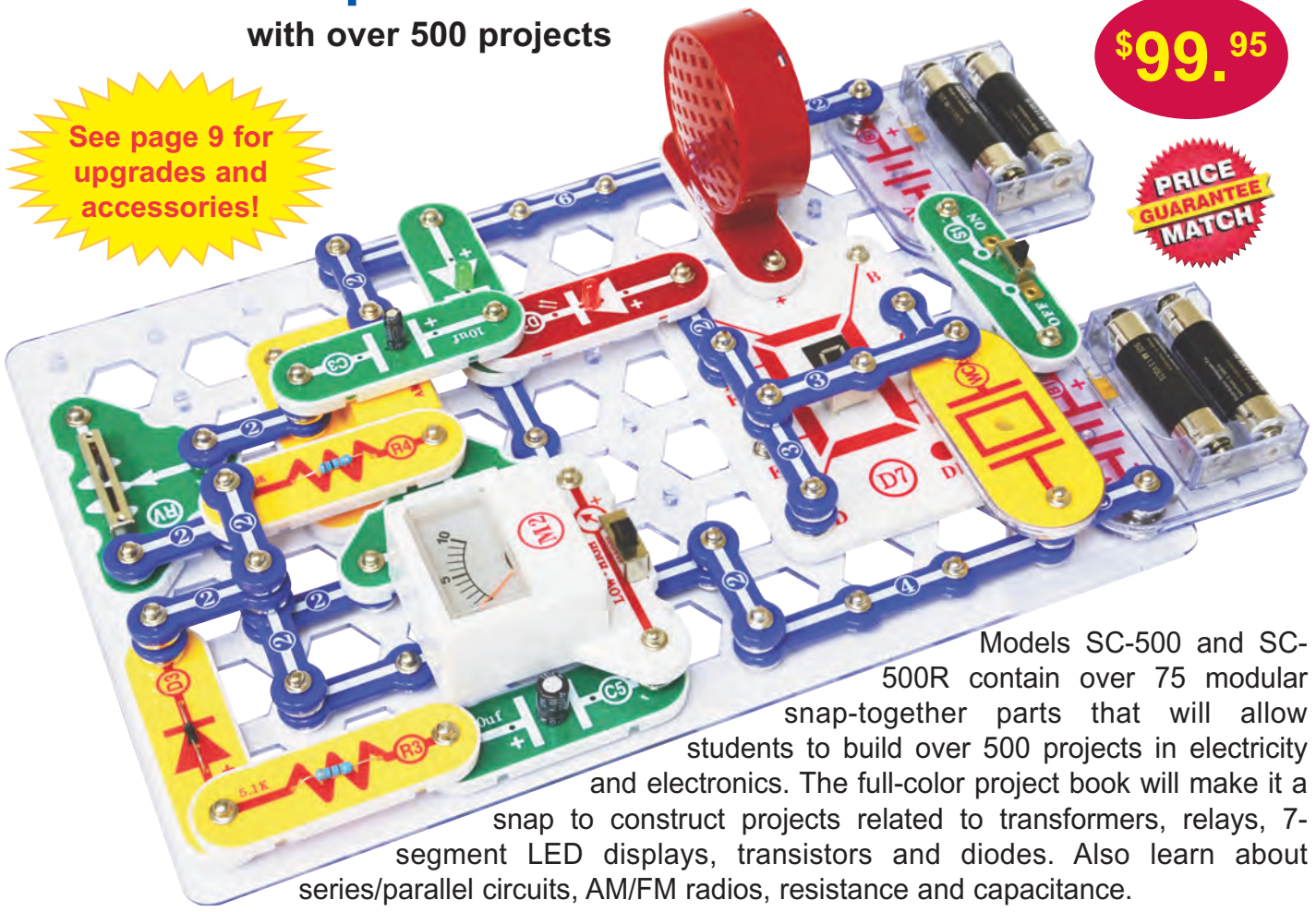
Snap Circuits® Pro Model SC-500

with over 500 projects

$99.95

PRICE GUARANTEE MATCH

See page 9 for upgrades and accessories!



Models SC-500 and SC-500R contain over 75 modular snap-together parts that will allow students to build over 500 projects in electricity and electronics. The full-color project book will make it a snap to construct projects related to transformers, relays, 7-segment LED displays, transistors and diodes. Also learn about series/parallel circuits, AM/FM radios, resistance and capacitance.

Build over 500 projects

Including:

- Digitally-Tuned FM Radio
- Adjustable Light Control
- Digital Voice Recorder
- Light Controlled Music
- AC Generator
- Flashing Numbers
- Music Meter
- Electronic Cat
- Plus all projects contained in the 300-in-1 (SC-300)!

Contains Over 75 Parts

Including:

- FM Radio Module
- Analog Meter
- Recording IC Module
- 7-Segment LED Display
- Diode
- Relay
- SCR
- Transformer

SC-500S - Deluxe Version, same as SC-500 plus 73 bonus,computer interfaced projects. Includes CI-73.

PRICE GUARANTEE MATCH

$119.95

Training Program Model SC-500R

(Same as SC-500 PLUS Case & Student & Teacher Guides, see page 9)

Over 100 educational pages to enhance the learning!

A value of over $190!

only

$159.95

PRICE GUARANTEE MATCH

Custom Storage Case

Each SC-500R comes with a lightweight, durable case with custom foam inserts to store all Snap Circuits® parts. Easy to identify missing components.

All models on this page require four (4) "AA" batteries, or an AC adapter - see page 9.

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

Snap Circuits® Extreme

Model SC-750

with over 750 projects

$139.95

PRICE GUARANTEE MATCH

See page 9 for upgrades and accessories!

Models SC-750 and SC-750R contain over 80 parts to build over 750 projects. Includes everything from SC-500 plus projects in solar, electromagnetism, vibration switches, and over 70 computer interfaced projects.

Build over 750 projects

Including:

- Strobe Light
- Electromagnetism
- Transistor AM Radio
- Rechargeable Battery
- Mega Pulser and Flasher
- Plus all projects contained in the 500-in-1 (SC-500)!

Contains Over 80 Parts

Including:

- Solar Cell (6SCB2)
- Electromagnet (6SCM3+B)
- Vibration Switch (6SCS4)
- Two-spring Socket (6SCPY1)
- CI-73 Downloadable Software and Interface cable

Training Program

Model SC-750R

(Same as SC-750 PLUS Case & Student & Teacher Guides, see page 9)

The SC-750R includes student guides with over 140 full-color educational pages to enhance the learning.

A value of over $220!

only

$199.95

PRICE GUARANTEE MATCH

Custom Storage Case

Each SC-750R comes with a lightweight, durable case with custom foam inserts to store all Snap Circuits® parts. Easy to identify missing components.

All models on this page require four (4) "AA" batteries, or an AC adapter - see page 9.

Ages 8 & up

IDEAL FOR HOME SCHOOLING - SNAP CIRCUITS® UPGRADES

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

PRICE GUARANTEE MATCH

Upgrade Kits Available

Get the additional parts and manuals to take your Snap Circuits® set to the next level!

UC-30 Upgrade Kit — $34.95

Converts SC-100 Snap Circuits® Jr. into SC-300 Snap Circuits®

includes 30 new parts (AM radio components, transistors, ICs, capacitors, resistors, & more) to build an additional 200 projects!

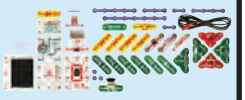
UC-40 Upgrade Kit — $69.95

Converts SC-100 Snap Circuits® Jr. into SC-500 SnapCircuits® Pro

includes 42 new parts, AM/FM radio, recorder, meter & more to build an additional 400 projects!

UC-60 Upgrade Kit — $99.95

Converts SC-100 Snap Circuits® Jr. into SC-750 Snap Circuits® Extreme



includes 49 new parts, including CI-73 computer interface, solar panel, to build more than 650 additional projects!

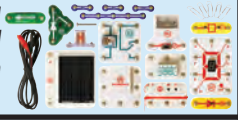
UC-50 Upgrade Kit — $34.95

Converts SC-300 Snap Circuits® into SC-500 Snap Circuits® Pro

includes 12 new parts (recording IC, transformer, FM radio, meter, & more) and 200 projects!

UC-70 Upgrade Kit — $69.95

Converts SC-300 Snap Circuits® into SC-750 Snap Circuits® Extreme



includes 19 new parts, including CI-73 computer interface,and solar panel to build more than 450 additional projects!

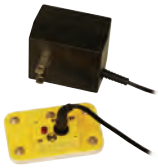
UC-80 Upgrade Kit — $39.95

Converts SC-500 Snap Circuits® Pro into SC-750 Snap Circuits® Extreme

includes 7 new parts, including CI-73 computer interface, and solar panel to build more than 250 additional projects.

Snap Circuits® Battery Eliminator

Model AC-SNAP



Works on all models of Snap Circuits®.

$19.95

Custom Storage Case

Model SNAPCASE7

Heavy duty plastic case with 2 custom foam inserts for housing your Snap Circuits® parts. Makes it easy to identify missing components and includes a separate small case to hold the smaller loose parts as well.

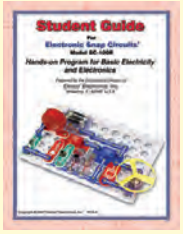
$59.95

Teaching Aids for the Homeschooler – Student Guides

Educational Series - Teaches about Basic Electricity & Electronics in the everyday world using our Learn By Doing® concept!

Junior Student Guide

Model 753294

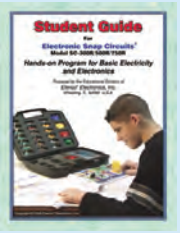


48 full-color pages
(Covers experiments 1-101)

$9.95

Extreme Student Guide

Model 753307



Enhance your learning with detailed explanations and quizzes. 137 full-color pages covering all 750 Snap Circuits® projects! Ideal for ALL Snap Circuits® mode. One book covers them all!

$24.95

Teacher Guide

Model 753290

The Teacher Guide is meant to prepare educators for proper troduction of Snap Circuits® and guide them through each chapter with quizzes for the students to test their knowledge.

$5.95

Ages 8 & up ELENCO® MINI SNAP CIRCUITS®

PRICE GUARANTEE MATCH

NEW! Flying Saucer Plus

Model SCP-09 — $19.95

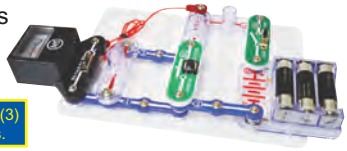
- Press and release the switch and watch the saucer rise into the air!
- 14 projects

Requires three (3) "AA" batteries.

NEW! Basic Electricity

Model SCP-10 — $19.95

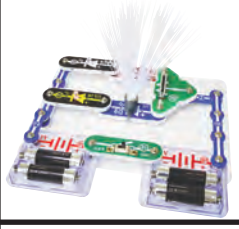
- Learn about basic electricity principles while having fun!
- 9 projects



Requires three (3) "AA" batteries.

NEW! LED Fun

Model SCP-11 — $19.95

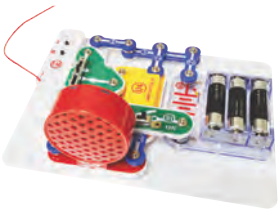


- Create your own colorful light show!
- 11 projects

Requires four (4) "AA" batteries.

NEW! FM Radio

Model SCP-12 — $24.95



- Build an FM radio that really works!
- 4 projects

Requires three (3) "AA" batteries.

NEW! Motion Detector

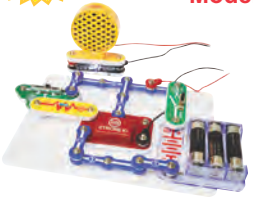
Model SCP-13 — $24.95

- When motion is detected, a laser sound is emitted and the color LED flashes.
- 12 projects

Requires three (3) "AA" batteries.

NEW! Strobe Light & Sound

Model SCP-14 — $24.95



- Adjustable-speed strobe light with sound effects.
- 14 projects

Requires three (3) "AA" batteries.

Ages 8 & up

ELENCO® DELUXE SNAP ROVER®
RADIO CONTROLLED VEHICLE

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

Model SCROV-50

$119.95

PRICE GUARANTEE MATCH

Introducing the next generation of the RC Snap Rover®! This version includes a disc shooter, digital voice recorder, and music sounds. Over 50 parts allow you to complete over 60 projects.

Features

- Disc shooter
- Digital voice recorder
- Music sounds
- Over 60 projects
- Over 50 parts
- Left & right turning control
- Goes forward & backward
- Headlight for use in the dark!
- Red & blue side lights
- Wireless remote control
- Run up to three Rovers at once
- No soldering required

Requires one (1) 9V and six (6) "AA" batteries.

(forward, back, left & right)

ELENCO® SNAP ROVER® - RADIO CONTROLLED VEHICLE

Model SCROV-10

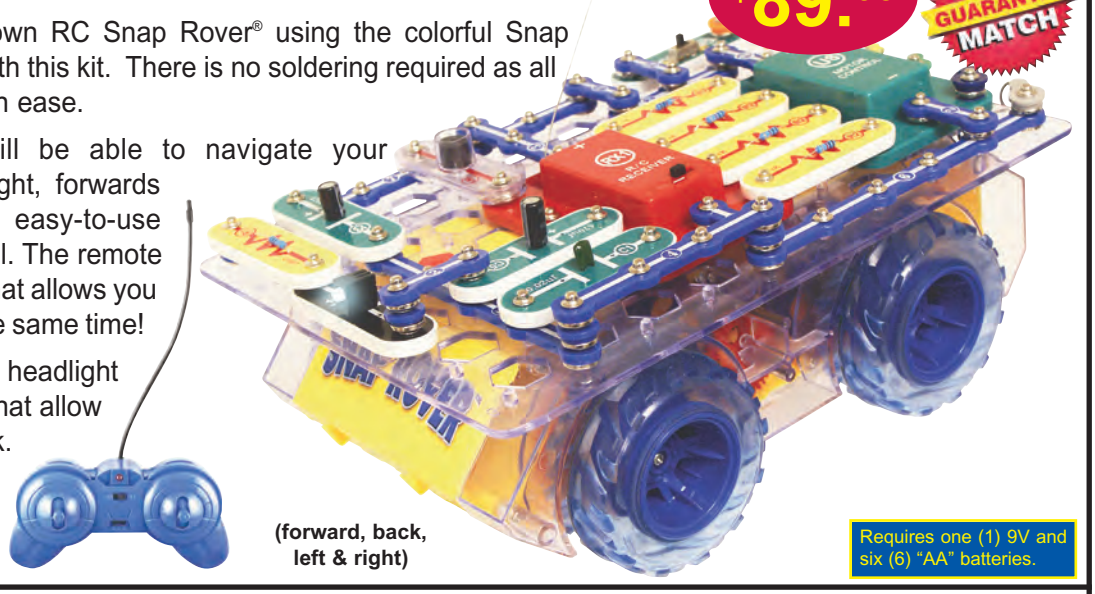
$89.95

PRICE GUARANTEE MATCH

Have FUN building your own RC Snap Rover® using the colorful Snap Circuits® parts that come with this kit. There is no soldering required as all the parts snap together with ease.

Once completed, you will be able to navigate your surroundings going left, right, forwards and backwards with the easy-to-use Snap Rover® remote control. The remote is a 27MHz multi-channel that allows you to run up to three cars at the same time!

Snap Rover® includes a headlight and red & blue side lights that allow you to operate it in the dark. Build over 20 projects. Includes over 30 parts.



(forward, back, left & right)

Requires one (1) 9V and six (6) "AA" batteries.

Deluxe Snap Rover® Upgrade Kit

Model UC-90

Upgrade your Snap Rover® to a Deluxe Snap Rover®! Includes the disc launcher, parts, and manual for over 40 new projects.

Includes foam discs!

$45.95

PRICE GUARANTEE MATCH

Ages 8 & up

ELENCO® LIGHT-SOUND COMBO

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

Model SCC-350

with over 350 projects

PRICE GUARANTEE MATCH

$149.95

A value of over $200!

Requires four (4) "AA" batteries.

Including:

- Color Light
- Light Show
- Color Oscillator
- Triple Blinker
- R/C Blink & Beep
- PNP Amplifier
- Light & Sound
- Electronic Keyboard
- Voice Changer with Echo
- Audio Amplifier
- Clicker
- Water Alarm

Contains Over 60 Parts

Including:

- Infrared detector
- Strobe light
- Color changing LED
- Glow-in-the-dark fan
- Strobe integrated circuit (IC)
- Fiber optic communication
- Color organ controlled by iPod or other MP3 player, voice, and fingers
- Pre-punched patterns for motor
- Keyboard with optical theremin
- Echo effects
- Voice changer: record voice or music and play it back at different speeds
- Sound energy demonstration
- Connect to your smart phone and analyze sounds with apps

Ages 12 & up

ELENCO® SNAP-MICRO™ I

$119.95

PRICE GUARANTEE MATCH

Model SCM-400

with over 25 projects

Snap-Micro™ I is an easy way to learn about micro-controllers and how they are used in the world around us. Our easy-to-follow instructions will guide you through the programming of basic commands by using flow charts to operate the micro-controller. After a brief intro, Snap-Micro™ I will have you programming over 25 projects such as data loggers, A/D converters, DC motors and much more using Snap Circuits® components. No prior understanding of micro-controllers required.

Snap-Micro™ I comes with all the components and software you need to get started. All that is required is a computer with Windows®-based system. The 86 page instruction manual is divided into 4 sections: Getting Started (electronic components), Flow Chart Programming and Snap Circuits® Basics, Programming for Snap Circuits®, and Audacity®* Sound Circuits. After the course is completed, you will have a better understanding of programming a micro-controller and how you can use them for real world applications.

86 page manual included

Learn About:

- Micro-controllers
- Flow charts
- Basic commands
- Electronic components
- Programming
- Data logging
- Sensors
- Analog to digital conversion
- Custom interface cable (included) plugs into the USB port on your computer.

UC-100 Upgrade Kit

This upgrade kit converts SC-300, SC-500, or SC-750 SnapCircuits® into SCM-400 Snap-Micro™ I

$74.95

* Audacity® is a registered trademark of Dominic M. Mazzoni, South Pasadena CA 91030

ELENCO® ELECTRONIC PROJECT LABS

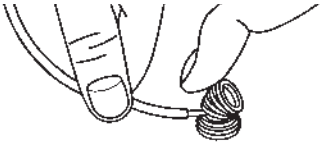
The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

NO TOOLS OR SOLDERING REQUIRED!

These "Electronic Science Labs" will teach you about electronics from A-Z. With these all-in-one labs, you'll learn about electronic parts, how to read schematics, and wiring diagrams. All this while building up to **500** different projects. These kits use two quick and easy hook-up methods:

Spring Method:

Simply slip pre-cut wires and components into special springs for a safe, secure connection.



Electronic Playground

Model EP-50

Over 50 Electronic Projects

Ages 10 & up

Build these exciting circuits:
- Finger touch lamp
- Magnetic bridge
- Voltmeter
- Morse code
- Alarm
- Electronic noisemaker
- Electronic kazoo
- Electronic keyboard
- AM Transistor radio
- Radio announcer
- Metal detector

Learn about:
- Voltage
- Current
- Resistors
- Capacitors
- Transistors
- Diodes
- Transformers
- Speakers
- Antennas

$24.95

Ideal for Middle Schools!

OVER 50 EXPERIMENTS

Specifically Designed for Beginners.

Requires one (1) 9V battery.

Uses spring hook-up method

$54.95

Ages 10 & up

Uses spring hook-up method

75-IN-ONE Electronic Project Lab

Model MX-905

- Easy-to-read, illustrated, lab-style manual included.
- Learn basic principles of electricity, electronics, physics and magnetism!

Requires four (4) "AA" batteries.

Everything You Need to Build:

• Timer Buzzer	• Electronic Organ	• Sound-sensor Timer
• Sound Alarm	• Motion Detector	• Four-level Photometer
• Burglar Alarm	• First-Aid Siren	• Two Stage Timer Sound
• Photo-level Alarm	• Pulse Width Modulation	• Voltage Detector
• Logic Tester	• Water Level Alarm	• Conductivity Tester
• Electronic Coin Toss	• Sound Level Meter	• Optical Volume
• Motion LED	• DC to DC Converter	• AND MANY, MANY MORE!

130-IN-ONE Electronic Playground

Model EP-130

- Easy-to-read, illustrated, lab-style manual included.
- Learn basic principles of electricity, electronics, physics and magnetism!
- Comes with built-in speaker, 7-segment LED display, two fully integrated circuits and rotary controls.

Everything You Need to Build:
- AM Broadcast Station
- Electronic Organ
- Strobe Lights
- Timer
- Logic Circuits
- AND MUCH MORE

$49.95

Requires six (6) "AA" batteries.

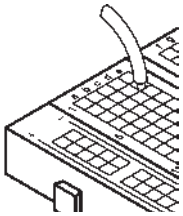
Ages 10 & up

Uses spring hook-up method

ELENCO® ELECTRONIC PROJECT LABS

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

Breadboard Method:
Featured in our advanced kits, this system is used by professionals and engineers. Just plug the components and wires into the special breadboard socket holes.



No soldering is required. Everything uses safe battery power - no dangerous AC is required, so it's safe for all ages. Labs come with all components and wires needed to build each project. NO TOOLS ARE REQUIRED. Easy-to-read, illustrated, lab-style manuals take you through each electronic experiment step-by-step. All are designed for ages 10 & up, so these are ideal for **MIDDLE SCHOOLS** and **HIGH SCHOOLS**.

500-IN-ONE Electronic Project Lab

Model MX-909

Features

- Everything you need to build 500 Exciting Electronic Projects.
- Learn the basics of electronics and put your knowledge to work creating 500 different electronic experiments, special lighting effects, radio transmitter and receivers, amazing electronic sound effects, cool games and MORE!
- Includes built-in breadboard for easy wiring and connection of components, and an LCD (Liquid Crystal Display) indicates the information during the experiments in process!
- Build your knowledge by exploring amplifiers, analog and digital circuits plus how to read schematic diagrams.
- Includes transistors, transformer, diodes, resistors, capacitors, phototransistor, CdS, integrated circuits, speaker, earphone, LEDs, LED digit display!
- Fact-filled, illustrated, lab-style manual included.

$299

Requires six (6) "AA" batteries.

Uses breadboard and spring hook-up methods

Ages 12 & up

300-IN-ONE Electronic Project Lab

Model MX-908

Ages 12 & up

$129

Uses spring and breadboard hook-up methods

Everything You Need to Build 300 Exciting Electronic Projects:

- A transistor radio
- IC (integrated circuit) organ
- Burglar alarm
- Delayed timer
- Electronic game
- Optical volume
- Multiplier
- Multiple counter
- Digital light dimmer
- Tone burst generator
- Audio signal tracer
- Electronic candle
- Voice level meter
- Metal detector
- Rain detector
- Voltage drop alarm
- Logic checker
- Function generator
- Voltage controlled amplifier
- AND MANY, MANY MORE!

Easy-to-read, illustrated, lab-style manual included.

Requires six (6) "AA" batteries.

200-IN-ONE Electronic Project Lab

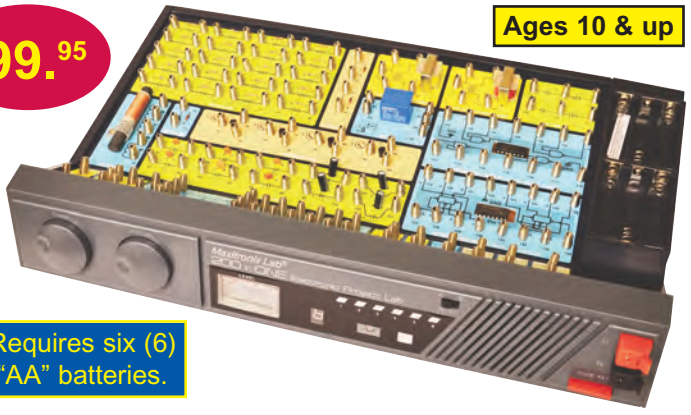
Model MX-907

$99.95

Ages 10 & up

Features

- Easy-to-read, illustrated, lab-style manual included.
- Learn about transistors, transformers, diodes, capacitors, oscillators, basic electronic circuits, and schematic symbols.
- Build your own Radio, AM Broadcast Station, Burglar Alarm, Electronic Game, Ohmmeter, Telegraph, Rain Detector, Amazing Sound Effects, and Much More!
- With built-in speaker, earphone, meter, seven-segment LED digital display, out-front controls, and more!



Requires six (6) "AA" batteries.

Uses spring hook-up method

Ages 8 & up

ELENCO® NON-SOLDERING RADIO KITS

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

Electronic Short Wave Radio Kit

Model MX-901SW

$21.95

Requires one (1) 9V battery.

Features

- Learn while building your own short wave radio kit - it's easy, it's fun, and it's safe!
- Explore the fascinating world of short wave radio!
- Receives band from 6 - 8MHz (SW1) and 12 - 18MHz (SW2).
- Easy-to-read illustrated operating manual included.
- Safe, solderless, exciting, educational, and fun!

Electronic AM/FM Radio Kit

Model MX-901AF

$21.95

Features

- Learn while building your own AM/FM radio kit - it's easy, it's fun, and it's safe!
- Tune in your favorite AM/FM radio stations - receives 520 - 1650kHz band and 88 - 108MHz band.
- Easy-to-read illustrated operating manual included.
- Safe, solderless, exciting, educational, and fun!

Requires one (1) 9V battery.

Electronic FM Radio Kit

Model MX-901F

$17.95

Features

- Learn while building your own FM radio kit - it's easy, it's fun, and it's safe!
- Tune in your favorite FM radio stations - receives 88 - 108MHz band.
- Easy-to-read illustrated operating manual included.
- Safe, solderless, exciting, educational, and fun!

Requires one (1) 9V battery.

Electronic AM Radio Kit

Model MX-901A

$16.95

Features

- Learn while building your own AM radio kit - it's easy, it's fun, and it's safe!
- Tune in your favorite AM radio stations - receives 520 - 1650kHz band.
- Easy-to-read illustrated operating manual included.
- Safe, solderless, exciting, educational, and fun!

Requires one (1) 9V battery.

Electronic Crystal Radio Kit

Model MX-901C

Features

- Safe, solderless, educational, and fun!
- Easy-to-read instructions included.
- Crystal diode converts RF to audio.
- Tune in your favorite AM radio stations!
- Learn how radios work.
- Includes earphone.
- For ages 10 and up.

$14.95

No batteries required!

4-in-1 Action Kit Lab Model MX-902

Electronic Motor Action Kit
Model MX-510M

Requires two (2) "AA" batteries.

$13.95 ea.

Generator Action Kit
Model MX-510G

$13.95 ea.

Get these 4 kits for the price of 3!

All 4 only $41.95

Electronic Bell Action Kit
Model MX-510B

Requires two (2) "AA" batteries.

$13.95 ea.

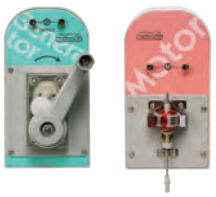
Electronic Meter Action Kit
Model MX-902ME
Included with MX-902

Requires two (2) "AA" batteries.

OR both together

Electronic Motor & Generator Action Kits

(save $3 on a 2-pack)
Model MX-902T



Requires two (2) "AA" batteries.

$24.95

Just a Few of the Many Exciting Experiments Included in the MX-902

- Controlling motor's forward/reverse rotation with generator.
- Fan using motor and generator.
- Electromagnet and reverse polarity.
- Operating the electric bell with generator.
- Color mixing with rotating color disc.

Features

- Safe, solderless, educational, and fun!
- Easy-to-read, illustrated, lab-style manual included.
- Discover how an electric bell is constructed and how it's made to ring.
- Build your own operating motor - it's easy, it's fun, it's safe!
- Find out how a generator makes the electricity that makes things work.
- Meter measures the amount of electricity used in your experiments.
- For ages 10 and up.

Ages 8 & up

JR. SCIENTIST SERIES

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

These kits contain all the materials you need to conduct experiments. The educational science guide included contains an experiment kit to enable you to quickly begin experimenting and helps you to thoroughly understand fundamental principles. Experience things that you cannot get from a school science textbook!

NEW!

Mini Electric Guitar
Model EDU-62104

$54.95

Grab this sweet mini 4-string electric guitar before they are gone! Features a built in amp and speaker so you can rock on the go and a standard 1/4" jack to plug in to a real amp and really get loud! Easy to assemble, fun to play!

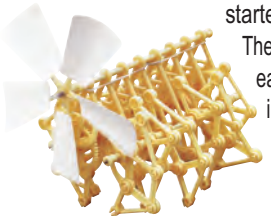
Requires two (2) "AA" batteries.

NEW!

Strandbeest
Model EDU-62221

$34.95

Build this Strandbeest kit yourself! It has a very interesting mechanism: blowing into the fan makes the animal start walking against the wind. The wind power is conveyed to the legs by 2 gears. The 28-page science guide gives you the history of the real Strandbeest that Theo Jansen started building in 1990. The guide also includes easy-to-follow assembly instructions.



NEW!

Rhinoceros Kit
Model EDU-62222

$34.95

This Mini Rhinoceros has excellent connections between crank shaft and every part enabling each leg to move smoothly. Blowing into the fan makes the animal start walking against the wind. The wind power is conveyed to the legs by 3 gears. The 24-page science guide gives you the history of the real Giant Beest that Theo Jansen started building in 1990. The guide also includes easy-to-follow assembly instructions.

Tumbling Robot
Model EDU-62019

$32.95

This little robot is tough! Run by a single motor, he walks with a decidedly "angry" pace -- and if he falls over, he picks himself up again! An awesome design with an amazing gear mechanism, he will not quit! Over 50,000 sold in Japan and a big hit at the International Robot Exhibition. Easy to build

Requires two (2) "AA" batteries.

Sound Control UFO
Model EDU-62022

$32.95

Navigated by a sound-sensitive remote control system, you can have hours of fun with this little guy. Measures 4.5" tall and 4.5" diameter, and weighs 8 oz. Simple assembly is required. No remote control needed!

Requires three (3) "AAA" batteries.

Insect Catcher w/ Ants' Nest Case
Model EDU-62003

$24.95

This kit is used to collect and observe ants and other small insects. It lets you clearly see how ants build their colonies.

Requires two (2) "AA" batteries.

Brine Shrimp Aquarium
Model EDU-62005

$24.95

This kit allows you to grow and observe Artemia Salina (also known as Brine Shrimp) with ease. With the water lens in the water tank, magnifying glass, and observation plate, you can observe the progress of the growth of brine shrimp. Science guide included (68 color pages).

Tyrannosaurus Rex Skeleton
Model EDU-62008

$24.95

Tyrannosaurus 1/35 Skeleton Model & Dinosaur Tooth, Trilobite, Ammonite Fossil Replica Creation Kit. This is a model based on the latest research on the Tyrannosaurus that lived in the Cretaceous period. By assembling and observing it you can research the ecology and evolution of dinosaurs.

Crystal Making Experiment Set
Model EDU-62010

$24.95

This enables you use pointed crystal base to create beautiful acicular (needle-shaped) crystals used to make crystal mobiles and crystalline figures. By using gemstone crystal base (alum), you can conduct an experiment making octahedral crystals. Science guide included (68 color pages).

Ages 9 & up

Engino® MEGA STRUCTURES

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

ENGINO® TOY SYSTEM is very unique in its ability to create complex builds even by using a small number of different parts. The versatile design of the components allows connectivity in all directions of the 3D space, while the patented extendable rods enable triangulations at any angle. The MEGA STRUCTURES series demonstrates this ability of Engino® to build huge models of impressive size and style.

London Eye
Model ENG-MS3

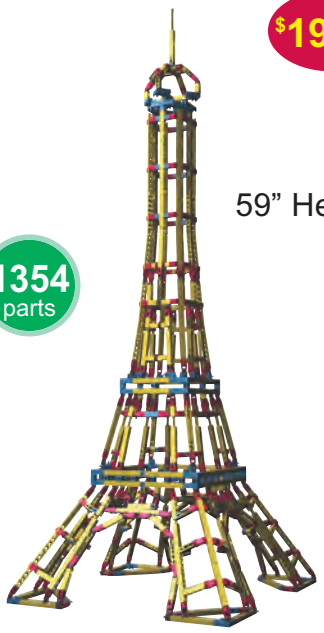
$299.95

1718 parts

35” Height

Eiffel Tower
Model ENG-MS1

$199.95



1354 parts

59” Height

Ferris Wheel
Model ENG-MS2

$159.95

890 parts

23” Height

Ages 8 & up

Engino® solar power™ SERIES

Global warming and Climate change has brought to our attention the need to save the planet by reducing Carbon emissions, the gasses released from the burning of fossil fuels and petrol. Our sun can provide free energy for all our needs; however, we need to convert it to a useful form. One of the most modern technologies harness solar power is the use of photovoltaic, especially when solar energy needs to be converted to electricity. The new Engino® solar power sets use photovoltaic panels to drive the various models and also have hybrid functions, in-line with the latest technological trends.

Solar-Powered Pro Duo
Model ENG-S30

$119.95

307 parts

20 Models

The solar pro duo set is the ultimate solar set, including two solar panels of 1.5V each, which may be connected in series for increased power. The panels can be connected directly to the motor or they can connect to the RC handset, powering up the models effectively even from a distance!

Solar-Powered Cars
Model ENG-S20

$94.95

282 parts

8 Models

Young inventors can now experiment with this technology using this hybrid Engino set. Engino® models can run either with solar energy or with battery power!
Includes a 20-page booklet with building instructions for 8 models.

Solar-Powered Machines
Model ENG-S10

$74.95

290 parts

8 Models

This set includes a 1.5V solar panel which drives a variety of models demon-strating the many different applications of solar power. The set includes a 20-page booklet with building instructions for 8 models.

Ages 6 & up

MECHANICAL SERIES

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

All contain a 36-page activity book with innovative experiments and detailed explanations of the different technological principles applied! Booklet with detailed building instructions also included.

8-in-1 Simple Machines Set

Model ENG-M10

192 parts

$99.95

This set is the combination set of the basic 8 sets of the mechanical science series. It covers all simple machines: the lever, the wedge, the wheel and axle, the screw, the inclined plane, and the pulley, as well as two more mechanisms, the gear and the linkage. Build 60 working models, including cars, cranes, and all different types of machines. A 70-page activity book is included.

Forces, Energy, and Motion

Model ENG-M11

114 parts

$59.95

NEW!

Learn all about Newton's Laws and Energy conservation. The set features 5 fully working models, a dragster powered by anelastic spring, a crash test car, a catapult, a gravity operated fan and a balon-powered flying plane! A 36-page activity book is included with innovative experiments and detailed explanations of the different technological principles applied!

Structures & Bridges

Model ENG-M09

190 parts

$54.95

Learn all about structures and how they literally support our lives! Discover the different types of bridges and forces and build 7 working models including a house, a suspension bridge, a cable-stayed bridge, an arch bridge, and two different truss bridges! A 36 page activity book and a booklet with detailed building instructions are included.

Screws

Model ENG-M08

150 parts

Learn how worm gears are used to greatly lower rotational speed and how screws can convert circular to linear motion while greatly increasing force. Build 5 working models, a screw press, a folding lifting platform, 2 cranes and a vise.

Gears

Model ENG-M07

150 parts

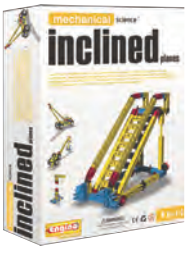
Learn how gears can easily reduce or increase speed, change Force, or transfer motion from one position to another. Build 6 working models, a gearbox, a hand drill, an egg beater, a helicopter, a rotating sign post and a high speed fan.

$47.95 Each This Row

Inclined

Model ENG-M04

132 parts



Learn how an Inclined Plane can be used to lift heavy objects and how is used in every day applications. Build 5 models including a splitting wedge, an automatic ramp with a car, an airport staircase and a car with crane.

Wheels

Model ENG-M03

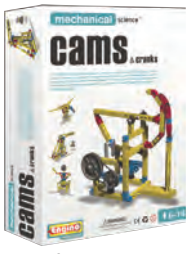
132 parts

Learn how wheels use friction to move objects easily and how turning wheels can help move around corners. Also how big wheels compare to small wheels. Build 5 models including a tractor, a motorcycle, a door, a car with steering wheels and a car lift.

Cams

Model ENG-M06

104 parts

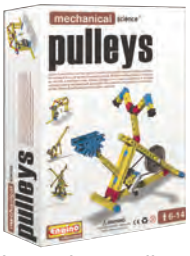


Learn how you can transmit power using Cams and Cranks are how these can be used to convert reciprocal to linear motion. Build 5 models including an oil drill, a flying eagle, a crane and a moving figure.

Pulleys

Model ENG-M05

104 parts



Learn how pulleys can be used to transfer force with reduced friction and how to increase force or speed at amazing levels. Build 5 working models including an oil drill, a stationary bike, cranes, bridges and a machine blender.

$39.95 Each This Row

Linkages

Model ENG-M02

96 parts

Learn how such links can be applied on various machines and build 6 working models including a mechanical extendable arm, a lifting platform, a pantograph, a moving figures toy, a folding ladder and a parallel weighting scale.

Levers

Model ENG-M01

96 parts

Learn how Levers are used to increase force and lift heavy objects and how the use of levers can change the direction of motion. Build 6 working models including a parking gate, a see-saw, 2 types of weighting scales and a wheelbarrow.

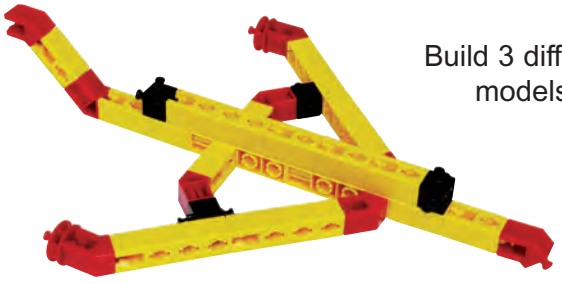
The inventor basic series has been developed for maximizing creativity and imagination. In each set many different models can be created from a wide range of themes, from structures to cars, planes and cranes! The bigger sets also include the 3V geared motor, allowing children to motorize many of their models. Detailed instructions are included for the major models while secondary models can be assembled by following the free to download internet instructions. All sets can be combined together to create bigger builds, limited only by the child's imagination.

3 Models Set

Model ENG-0320

$9.95

32 parts



Build 3 different models.

8 Models Set

Model ENG-0820

$19.95

90 parts

Build 8 different models.

10 Models Set

Model ENG-1020

89 parts

Build 10 different models.

$24.95

12 Models Set

Model ENG-1220

81 parts

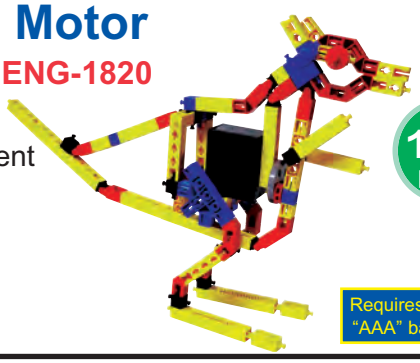
Build 12 different models.

$29.95

18 Models Set with Motor

Model ENG-1820

Build 18 different models.



104 parts

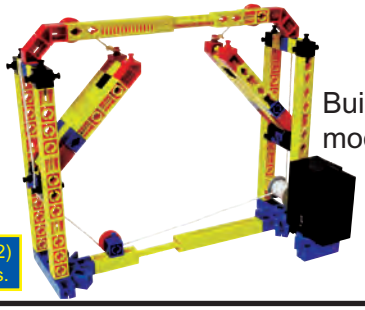
$44.95

Requires two (2) "AAA" batteries.

20 Models Set with Motor

Model ENG-2020

110 parts



Build 20 different models.

$54.95

Requires two (2) "AAA" batteries.

25 Models Set with Motor

Model ENG-2520

Build 25 different models.

110 parts

$59.95

Requires two (2) "AAA" batteries.

30 Models Set with Motor

Model ENG-3020

Build 30 different models.

193 parts

$79.95

Requires two (2) "AAA" batteries.

Ages 7 & up

Engino®

inVentor basic™ SERIES

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

The multi-model capability of ENGINO® TOY SYSTEM is proportional to the number of parts contained in the sets. The inventor pro series is the ultimate range more suitable for intermediate and advanced users who literally "play to invent"! The models created with these sets are bigger and more elaborate and can move with the new compact dual output motor. The motor is powered from a wired remote control, specially designed to also work with solar. The series starts with the 40 models set and goes all the way to the 100 models set which has 2 motors and extra gears for even more complex builds. Each set contains printed instructions for selected 10 models while the rest can be downloaded free from Engino's website.

40 Models Set with Motor

Model ENG-4020

Build 40 different models.

$79.95

175 parts

60 Models Set with Motor

Model ENG-6020

Build 60 different models.

$99.95

238 parts

80 Models Set with Motor

Model ENG-8020

Build 80 different models.

$114.95

277 parts

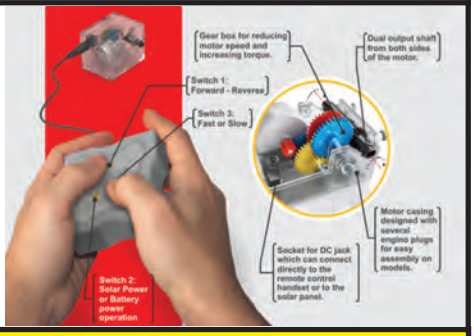
100 Models Set with 2 RC Motors and Gears

Model ENG-10020

Build 100 different models.

$149.95

498 parts



Ages 5 & up

Engino® ecobuilds™ NEW!

The first innovation of ENGINO® was the wood connectors, arange of plastic components which allowed wooden dowels of 3/8" x 3/8" to connect together without any glue or fasteners. This hybrid system forms the basis of the new Eco builds series which includes 4 starter sets and 2 advanced sets. The biggest set also includes the geared ENGINO® motor for animated models. The use of wood reduces significantly the plastic parts and leads to more efficient recycling, making this product an environmentally friendly solution.

ECO-Motorized Racers

Model ENG-EB70

$79.95

One of two advanced sets, Build 3 different motorized models.

177 parts

ECO-Offroaders

Model ENG-EB60

$54.95

One of two advanced sets, Build 3 different models.

162 parts

ECO-Cars

Model ENG-EB10

83 parts

Build 3 different models.

ECO-Motorbikes

Model ENG-EB11

$29.95 Each in this row

92 parts

Build 3 different models.

ECO-Planes

Model ENG-EB12

119 parts

Build 3 different models.

ECO-Helicopters

Model ENG-EB13

119 parts

Build 3 different models.

Ages 8 & up

LEONARDO DA VINCI KITS

Snap-together assembly required

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

The scientific genius of Leonardo da Vinci is brought to life through these 15 articulated models. The inventions that inspired these snap-together replicas are taken from the pages of da Vinci's priceless and awe-inspiring notebooks. All models are made of plastic and require no special tools. Da Vinci Manuals are very educational and teach how these inventions have evolved into what they are today. **No batteries required!**

Mechanical Drum

Model EDU-61001

$19.95

Leonardo da Vinci's Mechanical Drum is a cart equipped with an amply sized drum. When pulled by its handle, the gears turn the two lateral drums, which are fitted with pegs. The pegs move a total of ten drumsticks that cause them to beat the large drum.

Aerial Screw

Model EDU-61002

$19.95

The Aerial Screw designed by Leonardo da Vinci was a precursor of the modern day helicopter. The device was designed to compress air in order to obtain flight.

Swing Bridge

Model EDU-61003

$19.95

Leonardo da Vinci's Swing Bridge design is a portable, lightweight bridge that was intended to span across a body of water so armies could cross and then quickly disassemble and tow away. By means of an articulated system of winches and wheels, the bridge was designed to rotate 90 degrees.

Printing Press

Model EDU-61004

$19.95

Leonardo da Vinci studied the Guttenberg printing press and finely-tuned it for greater efficiency. In his design , da Vinci used a handpress with an automatic system that moved the type-saddle forward and back along a tilted surface.

Multi-barreled Cannon

Model EDU-61005

$19.95

Attempting to increase the firepower of a traditional cannon, Leonardo da Vinci designed the 12-barreled gun carriage in the fifteenth century. This cannon, which was designed to rest on a rolling cart, had a wider target area and also had the advantage of being able to be loaded at the same time it was firing.

Armored Car

Model EDU-61006

$19.95

Leonardo da Vinci's armored car was the precursor to the modern-day tank. Da Vinci's design was capable of multi-directional movement and was equipped with cannons that were arranged in a 360-degree firing range around its circumference.

Paddleboat

Model EDU-61007

$19.95

Leonardo da Vinci's time, nautical expedition was the most expedient method of communicating with the world. Da Vinci brought forth plans for a boat with large wheel-shaped paddles that would propel it through water.

Propelled Cart

Model EDU-61008

$19.95

Leonardo da Vinci designed the first self-propelled cart capable of moving without being pushed or pulled manually. The precursor to the automobile was one of the many inventions that da Vinci created dealing with locomotion and transportation.

Ages 8 & up

LEONARDO DA VINCI KITS

Snap-together assembly required

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Catapult

Model EDU-61009

Leonardo da Vinci improved upon the already-established catapult design when he introduced his own vision the age-old military launching device. The plans for the new catapult employed a hand crank that caused tension on the throw arm before releasing a projectile.

$19.95

Bombard

Model EDU-61010

To make the bombard or cannon more effective, Leonardo da Vinci designed projectiles that contained a quantity of mini gunpowder shots packed into petal-shaped iron pieces that formed a ball. After assembly, the cannonball was loaded into the barrel of the bombard and fired.

$19.95

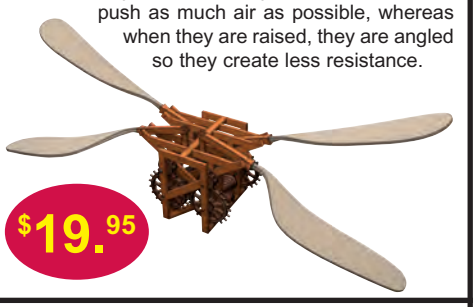
Mechanical Butterfly

Model EDU-61018

Leonardo da Vinci himself advised where one can admire these incredible flying insects: To see four-winged flying, look near ditches and you will see dragonflies.

It is extremely difficult to create a mechanical replica of the natural movement of an animal. The beating of the dragonfly's four wings is particularly complex and Da Vinci was well aware of how difficult it would be to create this machine; he himself described it in great detail. It is not simply wings beating up and down; it's a jointed motion.

Whilst beating down, the wings are "flat" in order to push as much air as possible, whereas when they are raised, they are angled so they create less resistance.



$19.95

Submarine

Model EDU-61020

$19.95

A boat with sails has a part that is submerged in the water and invisible to enemies. The pilot used a passage to get into the lower part undercover: the Mechanical Submarine. A pulley and rope system lowers the submarine, which can unhook itself underwater and proceed invisibly towards the enemy. The submarine has two air chambers, which can be used for steering and for air needed by the pilot, who has a mouthpiece. Steering underwater is done by means of a mechanical system.

Great Kite

Model EDU-61021

$19.95

The genius Da Vinci drew inspiration for his work from his direct observation of the flight of a bird. Da Vinci described its dimensions, the materials with which it is to be built, and its shape and how it works; the whole notebook revolves precisely around the construction and use of the machine.

Da Vinci also imparted some "flying lessons" on how the pilot should operate the machine. The piloting must have been complex. He would use his hands and feet to activate ropes and could rotate, move and open and close the wings with his own movements.

Multiple Sling

Model EDU-61022

$19.95

Leonardo da Vinci's idea was to build a very powerful machine, which could throw eight large projectiles at the same time. He positioned eight long arms in a circle around a central pin, each of which had a sling capable of throwing a projectile attached to it.

This kind of project, where weapons were developed to hurl multiple projectiles to be more powerful, was common in Da Vinci's time, because doing this meant creating more powerful weapons, simply by increasing their number and power, without the need to develop new building techniques and using familiar materials. They were therefore potentially attractive weapons because they were powerful, but they were also relatively inexpensive.

Ship's Cannon with Shield

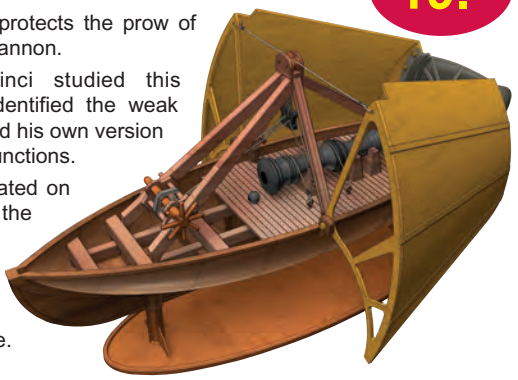
Model EDU-61023

$19.95

A wooden shield protects the prow of the ship and the cannon.

Leonardo da Vinci studied this subject closely, identified the weak points and invented his own version with many more functions.

First, he concentrated on the structure of the vessel, which needed to be reinforced and keep the cannon firmly in the middle.



Adventures in Fiber Optics
Model FO-25

$54.95

Have an adventure in Fiber Optics! Have FUN doing exciting fiber optic projects like these: Image Magnifier, Lighted Constellation Map, Fiber Optic Wand or a Fluorescent Holiday Wreath, and many more projects. This kit contains 20 different experiments plus five unique projects. Each activity contains step-by-step instructions and explanation of the results, plus historical facts or scientific trivia on fiber optics. A great product to educate as well as entertain.

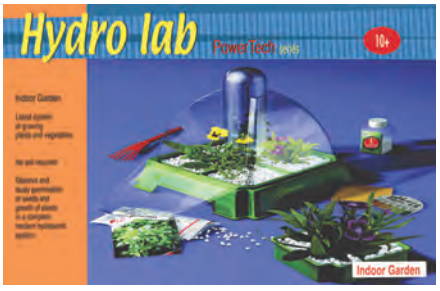
Ages 12 & up

Requires two (2) "AA" batteries.

Hydrolab
Model EDU-8740

$49.95

Complete greenhouse system for cultivating plants and vegetables in an "indoor" environment, without soil, using a modern Hydroponics system. The kit comes with a base, adjustable translucent observation cover, four growing trays, fertilizer tank, safe chemicals and bedding for propagating the growth of plants.



Ages 10 & up

Solar Power
Model EDU-8405

$45.95

150 Challenging Experiments. Convert solar energy. Build a solar electric generator, motor, water heater, furnace, thermometer, crane and solar energy mobiles.

Unique experiments with color optics, electro-plating, stroboscopes, thermodynamics and Moiré patterns.

Ages 10 & up

Solar Energy
Model EDU-3050

$12.95

All you need to build your own complete solar energy lab. Kit includes over 25 sunny and fun experiments. Learn about conservation of energy. Complete with solar energy collector and solar heater. Study light, optics and magnification.

Ages 8 & up

Weather
Model EDU-7074

$29.95

Over 30 fascinating activities all about weather and climate. Build your own barometer, weather vane, rain gauge, and hydrometer. Observe the weather traits and see how they'll affect tomorrow's weather. Make a rainbow, produce clouds, lightning, rain, and even a thunderstorm!

Ages 8 & up

Requires one (1) 9V battery.

Detectolab
Model EDU-7080

$29.95

Investigate, analyze, decipher and solve the crime! Over 65 activities with fingerprints, secret messages, chromatography, cipher codes, identity detection and more... Kit includes 30X microscope and necessary lab equipment.

Ages 8 & up

Requires two (2) "AA" batteries.

Electricity
Model EDU-2018

$15.95

Introduction to electricity and electrical circuits. Learn about series, parallel, and broken circuits, voltage, current, resistance, switches, wires, contacts, resistors, and light bulbs.

Ages 8 & up

Requires four (4) "AA" batteries.

Crystal Radio
Model EDU-3010

$15.95

Build your own working crystal radio. Look for and pick up radio stations. Earphone and antenna included.
No tools or batteries required. Remember the days of the first radio.

Ages 8 & up

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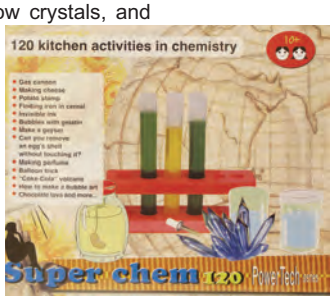
Super Chem 120
Model EDU-8355

$39.95

120 activities with fun science and kitchen chemistry. Make giant soap bubbles and 3D soap bubble sculptures. Make monster dough, grow crystals, and create secret writing. Prepare your own fun, shaped soap, a volcano and a propelled motor boat. You will make yogurt, ice cream, cookies, gelatin figures and even cheese. Observe the way plants react to chemicals and light. A full-colored, simple-to-read instruction manual is included with this kit.



Ages 10 & up

Super Chem
Model EDU-8350

$35.95

100 kitchen activities in chemistry include balloon trick, gas cannon, making a geyser, cleaning old coins, cola volcano, removing an egg's shell without touching it, making soap bubble solution, making invisible ink, making cheese, potato stamp, finding iron in cereal, and many more!

Ages 8 & up

Physics
Model EDU-8200

$39.95

Have no fear of physics! 250 captivating experiments which will introduce you to this fascinating field! Experiment with electricity, magnetism, motors, gases, liquids, heat, sound, force, pressures and motion. Understand nature's basic laws.

Ages 10 & up

Requires two (2) "AA" batteries.

Chemistry 60
Model EDU-7075

$32.95

Beginning chemistry set includes 60 fun activities with no chemicals. Activities include three-dimensional bubbles, basic chemistry, crystal growing, physics, magnetism, optics, growing plants, slime & gook, science tricks, and chromatography.

Ages 10 & up

Warning: This product contains magnets.

Crystal Wonder
Model EDU-CM007

$34.95

A wonderful kit packed with exciting activities. Make crystals of all shapes, sizes and colors. The kit includes 12 different colored salts, a display stand and all the equipment needed to produce crystals. Other activities include making jewelry, creating a crystal garden and decorative crystal gifts.

Ages 10 & up

Volcano
Model EDU-CM011

$34.95

Get in touch with nature at its most powerful and awesome. Make an erupting volcano, complete with light and sound effects. Trace the development of volcanoes and produce different types of eruptions. Other activities include: how to make a fire extinguisher, a lava light, chocolate lava and much more.

Ages 10 & up

Requires two (2) "AA" batteries.

Paper Making Kit
Model EDU-7095

$25.95

Have fun recycling paper to create new paper of your own design. Choose colors, size, and decorations. Use your recycled paper to make a photo album, mobiles, containers, paper animals, and flowers. Make greeting cards, notepaper, envelopes and picture frames, and much more; just use your imagination! Detailed instructions of all these items included in manual.

Ages 10 & up

Water Clock
Model EDU-3070

$24.95

Make a clock that can work just on tap water! You will never need batteries again! Also works on a variety of household materials such as: cola, fruit juice and even ketchup! Try other materials and see how the clock never stops. This is the best timekeeper you will ever have.

Ages 8 & up

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NEW!

Microscope & Telescope Set with Survival Kit
Model EDU-TM008

$99.95

TM008 Features:

40x Telescope:
- 16" (41cm) Body
- 20x 30x 40x Eyepiece
- Diagonal mirror
- 30mm Ø objective lens
- 10" (25cm) tripod

Survival Kit Includes:
- Foldable 5-in-1 design
- 3x Binoculars
- Compass
- Whistle
- Emergency signal
- Mirror

1200x Diecast Microscope Includes:
- 9" (23cm) Huygens'Eyepiece microscope with color filters
- Micro Hatchery®
- (10) Blank slides
- (24) Cover glasses
- (24) Blank labels
- (24) Statical slide covers
- (2) Prepared slides
- Petri dish with magnifier®
- (2) Collecting vials
- Needle
- Scalpel
- Spatula
- 2-in-1 45mm Ø Magnifier
- Carrying case included(28.3" x 15.9" x 6.7")

288x Astrolon™ Telescope w/ Aluminum Tripod
Model EDU-36944

$99.95

Features
- 6 x 25mm Finderscope
- 2.3x Barlow lens
- 50mm ø Objective lens
- Diagonal viewer and two (2) interchangeable eyepieces
- Space map
- 36" Adjustable aluminum tripod
- Includes carrying case

50mm ø Objective Lens | 6 x 25mm Finderscope | Diagonal Mirror

35x-50x 50mm Zoom Terrestrial Telescope
Model EDU-36685

$59.95

Features
- Huygens' zoom eyepiece
- 50mm ø Objective lens
- 25" Aluminum telescope body
- 18" Aluminum tripod

50mm ø Objective Lens | 25" (65cm) Telescope Tube | Huygens' Zoom Eyepiece

Galaxy Star Finder
Model EDU-37364

Features
- Star projector
- Rotational on/off switch
- Light on/off switch
- Instructional pointer

$46.95

Requires six (6) "AA" batteries

20x • 30x • 40x Mobile Telescope w/ Tripod
Model EDU-41005

$26.95

Features
- 20x/30x/40x Eyepiece
- Diagonal mirror
- 16" ABS body
- 30mm ø Objective lens
- 10" Tripod

30mm ø Objective Lens | Diagonal Mirror | 20x • 30x • 40x Eyepieces

NEW!

Night'n Day Globe

Model EDU-37502

$195.95

The Night'n Day® Real Solar Time Rotating Globe is a clock and calendar that shows the time of day and date for any location on earth. It also demonstrates which parts of the earth are in day/night. As the globe turns, you can see where people on earth are experiencing sunrise, sunset and twilight times.

Features

- Assembly and set-up required
- 11" (28cm) globe.
- 17" (43.18cm) tall.
- AC adapter included
- Ages 14+

$59.95

11"Dual-Cartography Illuminated Globe

Model EDU-2837

Features

- Dual-cartogrphy design, This globe diplays the geograpical freatures of the world when the light is off, but when the light is on, it diplays the politcal map of the world
- Shows regions where different animals live.
- More than 250 pictures and each picture is accompanied with text for easy identification.
- Educational & fun for all ages!

11" Desktop Political Globe

Model EDU-36899

2-piece construction with a sturdy base.

$33.95

$54.95

Wildlife Globe

Model EDU-37149

Features

- When the globe illuminates in the dark, more creatures appear in the oceans.
- Shows regions where different animals live.
- More than 250 pictures and each picture is accompanied with text for easy identification.
- Educational & fun for all ages!

5" Desktop Political Globe

Model EDU-36920

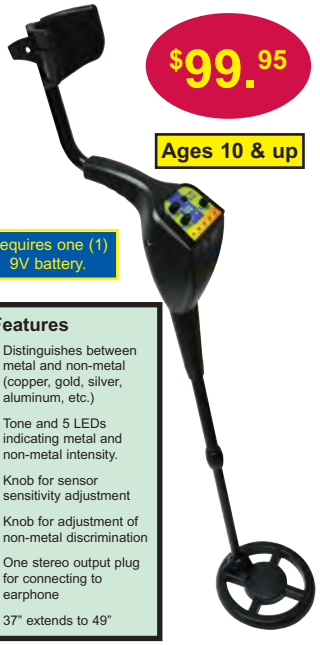
2-piece construction with a sturdy base.

$14.95

METAL DETECTORS & OUTDOOR EXPLORATION

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

MultiSense Metal Detector
Model EDU-36966



$99.95

Ages 10 & up

Requires one (1) 9V battery.

Features
- Distinguishes between metal and non-metal (copper, gold, silver, aluminum, etc.)
- Tone and 5 LEDs indicating metal and non-metal intensity.
- Knob for sensor sensitivity adjustment
- Knob for adjustment of non-metal discrimination
- One stereo output plug for connecting to earphone
- 37" extends to 49"

Metal Detector with Beep
Model EDU-36749

Features
- Aluminum extension from 23" (58cm) to 38" (96cm)
- High-low sensitivity adjustment
- LED display
- Durable ABS body
- Low electrical consumption

$36.95

Ages 8 & up

Requires one (1) 9V battery.

Metal Detector (Security Wand) Kit
Model MX-700K (assembly required)

$25.95

- All-metal detection
- Visual target response - red LED flashes
- when a metal object is detected.
- Audio alert - high pitch sound.

Requires one (1) 9V battery.

Ranger Remote Controlled Metal Detector
Model EDU-37173

NEW!

Features
- 30 foot range
- Locate and find treasure
- High traction tires

Includes:
- RC metal detector and transmitter
- (2) Digging tools
- (4) Gold coin replicas

$79.95

Ages 8 & up

Requires one (1) 9V battery. and four (4) "AA" batteries

Rock Tumbler
Model EDU-36793

Ages 10 & up

$59.95

Shown with optional refill kit.

Rock Tumbler Includes:
- 4 oz. gemstone rocks
- (1) Step 1 coarse grinding powder
- (1) Step 2 fine grinding powder
- (1) Step 3 polishing powder
- (1) Step 4 fine polishing powder

Jewelry Making:
- 18" silver tone necklace chain
- (2) adjustable rings
- (1) key chains
- (1) pairs hanging earring wires
- (3) setting holders in 3 styles
- (1) jump ring connectors
- Glue

AC Adapter included
No Batteries Required!

Rock Tumbler Refill Kit
Model EDU-36925

$21.95

Rock Tumbler Refill Includes:
- Extra belt
- (2) 8oz. bags gemstone rocks
- (2) bags Step 1 coarse grinding powder
- (2) bags Step 2 fine grinding powder
- (2) bags Step 3 polishing powder
- (2) bags Step 4 fine polishing powder

Jewelry Making Includes:
- 18" silver tone necklace chain
- (4) adjustable rings
- (3) key chains
- (3) pairs hanging earring wires
- (12) setting holders in 2 styles
- (12) jump ring connectors
- Glue

Remote Controlled Black Widow
Model EDU-37526

Features
- Fully assembled
- Full-function: moves forward, left, right, stops, and turns in reverse.
- RC Black Widow performs simulated walking action with moving legs.
- Actual motion is achieved through hidden drive-wheels.
- Works indoors and outdoors on smooth surfaces with 25 foot (8 meter) range!

$54.95

Ages 8 & up

Requires one (1) 9V and four (4) "AA" batteries.

Water Filtration Kit
Model EDU-37677

NEW!

Water goes on quite a journey to reach our taps, safe and ready to drink. One of the many important steps in the process is filtration, which uses layers to sift containments out of the water. The kit here introduces how water gets cleaned by building a simple filtration system and more

Includes:
- 3x Gravel 80g
- 3x Sand 80g
- 3x Active Carbon 40g
- 5x 100mm filter paper
- 6x 45mm filter paper
- 1x 50ml Measuring cup

$29.95

Nature Science

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

Ant World

Model EDU-BL073

$22.95

NEW!

Ants not included

Includes:
- Plastic ant housing
- Scene stickers
- Connectable magnifying box
- Tubing
- Feeding pipette
- Tunneling sand
- Illustrated instruction manual

Ages 5 & up

Worm World

Model EDU-BL075

NEW!

$22.95

Worms not included

Includes:
- Plastic worm housing
- Tunneling material
- Shade
- Illustrated instruction manual

Ages 5 & up

Insect Exploring Kit

Model EDU-BL131

$19.95

NEW!

Includes:
- Multi-level ant house
- Ant tunnel
- Ant platform
- 2-Way viewer Allows 2 people to view simultaneously
- Top view 4x magnification
- Easy grip handles
- Fully illustrated color instruction booklet

Ages 5 & up

Frog Dissection Kit

Model EDU-37307

$49.95

Includes:
- Authentically detailed frog body
- Removable texture organs
- Cross sections show muscle structure
- Glow-in-the-dark "X-ray" included
- Child safe lab tools included
- 12 removable parts

Ages 8 & up

Bug Collector Set

Model EDU-37310

$29.95

Features
- Bug collector can gently collect the little giants without hurting them.
- Observe and discover living insects and plants.
- Check and look around with bug collector, net, and tweezers for insects and plants.

Ages 5 & up

Periscope

Model EDU-37363

NEW!

$29.95

Features
- View objects over walls and around corners!
- Periscope extends from 21" to 29"
- Adjustable handles
- Spy View

Ages 8 & up

4x•6x Two Way Bug Viewer

Model EDU-36888

$9.95

Features
- Allows 2 people to view simultaneously.
- Ventilated bug viewer with base and easy-grip handles.
- 6x magnification (top view), 4x magnification (bottom view).
- Includes rubber spider.

Ages 5 & up

3x28mm Binoculars

Model EDU-BN328

NEW!

$4.95

Features
- 3x Magnification
- Rigid construction
- 3 Assorted colors: Yellow, Red, Blue

Ages 6 & up

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

Do-It-Yourself (DIY) 3D Anatomy Kits w/ CD

3D Eyeball Kit
Model EDU-SK007

Assemble 3D eyeball model
Over 30 pieces

3D Heart Kit
Model EDU-SK009

Assemble 3D heart model
Over 30 pieces

3D Brain Kit
Model EDU-SK010

Assemble 3D brain model
Over 30 pieces

All three 3D anatomy kits come with a highly detailed finish and collectable quality. Display stand and CD included; CD contains interactive computer programs that explain the functions either the eyeball, heart, or brain, as well as games to help with understanding the functions. Computer programs compatible with Windows® or Macintosh operating systems.

11pc. 20" Human Anatomy Torso Model
Model EDU-41007

Features
- Hand painted in vivid and natural colors
- 11 Dissectible parts (EDU-41007) 8 Dissectible parts (EDU-41006)
- ABS base
- Fully illustrated color instruction manual
- Snaps together

$99.95

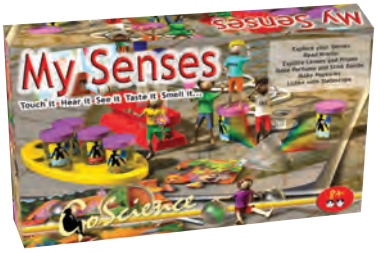
8pc. 10" Human Anatomy Torso Model
Model EDU-41006

$39.95

My Senses
Model EDU-7086

$39.95

This kit is part of our Body Awareness Science Series, exploring the five senses: sight, hearing, smell, taste, and touch. Perform over 50 fascinating experiments. Use a genuine stethoscope, make a telescope with real lenses and create rain-bows with a prism. Prepare perfume and stink bombs with chemistry lab equipment. Learn how to read and send messages in Braille. Also includes many activities suitable for party games.



My Health Breathing Kit
Model EDU-7092

$29.95

Activities show how the lungs work. Explanation of how to check the volume of air intake into your own lungs. Includes a precision-made airflow meter that can check your own intake of air and check if you are within the normal age.

My Health Vision Kit
Model EDU-7094

$19.95

A simple explanation of how the eye works. Includes activities that demonstrate some of the eye's functions, a precision-made piece of optical eye testing equipment to test the eyes for normal sight, short-sightedness and long-sightedness, and eye testing charts.

ELENCO® SNAP-TOGETHER SKELETONS

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

T-Rex Skeleton
Model EDU-37329

$71.95

Imagine bringing a dinosaur back to life! Now you can, with the 36-inch EDU-TOY Tyrannosaurus Rex Skeleton. Unravel the mysteries of this majestic creature as you assemble the bones of this massive creature that roamed the earth 65 million years ago.

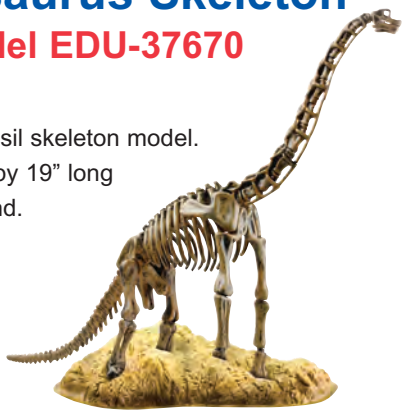
With the T-Rex model from C&S Sales, you create your own scale replica of this eight-ton tyrannosaurus that was nicknamed the “Tyrant Lizard King”. After snapping all 51 pieces together, you can begin to imagine the enormity of this 20-foot tall creature whose body spanned a full forty feet!

The T-Rex skeleton can be displayed or disassembled for later use.

Brachiosaurus Skeleton
Model EDU-37670

NEW!

- 23-piece realistic fossil skeleton model.
- Measures 13.5” tall by 19” long
- includes display stand.



$29.95

Velociraptor Skeleton
Model EDU-37671

NEW!

- 24-piece realistic fossil skeleton model.
- Measures 10.25” tall by 25” long
- includes display stand.

$29.95

PEG SCULPTURE HEADS

Introducing PegSculpture® Forensic Head Reconstruction Kits! Use simplified forensic facial reconstruction techniques. These great kits allow children to peg, build and sculpt the heads with supplied tools and modeling clay. Supplied with head pieces, numbered pegs, molded eyes, nose, and ears. A great head sculpture series for ages 8 and up with adult supervision.

Julius Caesar
Model EDU-557

$39.95

T-Rex
Model EDU-559

$39.95

Each Includes:

- Sturdy head stand
- Set of molded pegs and numbered to give flesh depth.
- Roller and sculpting tools.
- Full step-by-step DVD
- Skull with muscles and peg holes.
- Modeling clay is included.
- Molded eyeballs, ears and nose.
- Instruction manual

Queen Nefertiti
Model EDU-567

$29.95

Tutankhamun
Model EDU-568

$29.95

5-in-1 100x-1200x Deluxe Microscope

Model EDU-23703

Requires two (2) "AA" batteries

Includes:

- 11" microscope with micro viewer
- Microphoto projector and drawing device
- Micro Hatchery®
- Micro Slicer®
- (2) Prepared slides
- (10) Blank glass slides
- (12) Cover glasses
- (12) Statical slide covers
- (12) Blank labels
- (4) Collecting containers
- Petri dish with Magnifier
- Spare bulb
- (3) 10mL Graduated cylinders
- (2) Collecting vials
- Tweezers and needle
- Spatula, scalpel, dropper, stirring rod
- 3x / 6x Magnifier
- Scissors, condenser lens cap, and safety glasses
- Instruction manual

Ages 10 & up

$99.95

Digital Eye Scope

Model EDU-38002

Features

- Three-LED light source for specimen illumination
- Color CMOS Sensor resolution: 300k pixel (VGA)
- Fast preview frame-rate: 30fps
- Convenient-access snapshot button for image captures
- Easy to capture IMAGE & VIDEO on your PC or MAC!
- Free USB driver for Windows® XP/Vista, Mac OS 10.0.4.x USB 1.1, 2.0 or above
- Ground glass optical lenses

NEW! Low Price!

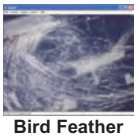
$39.95

Ages 8 & up

No Batteries Required!

Grasshopper Abdomen

Fish Scale



Bird Feather

Snake Scale

100x•300x•1000x 2-Way Microscope

Model EDU-41009

Includes:

- 12" 2-way microscope w/ viewer and projector
- Micro Hatchery®
- (6) Prepared slides
- (12) Blank glass slides
- (12) Cover glasses
- (12) Statical slide covers
- (12) Blank labels
- Vial of shrimp eggs
- Vial of shrimp chloride
- Vial of Eosin
- Vial of methylene blue
- Petri dish w/ Magnifier®
- (2) 10mL Graduated cylinders
- (4) Collecting vials
- Tweezers
- Needle
- Spatula

$59.95

Requires two (2) "AA" batteries

Ages 10 & up

100x-900x Zoom Microscope Set in Hand Carrying Case

Model EDU-41011

$54.95

Includes:

- 9" Microscope w/ Huygens' eyepiece and color filters
- Micro Data Bank®
- Micro Slicer®
- (12) Blank slides
- (12) Cover glasses
- (12) Statical slide covers
- (12) Blank labels
- Petri dish w/ Magnifier
- (2) 10mLGraduated cylinders
- (4) Collecting vials
- Tweezers
- Needle and scalpel
- Stirring rod
- Condenser lens cap
- Spare bulb
- Instruction manual

Requires two (2) "AA" batteries

Ages 10 & up

100x-900x Zoom Die-Cast Microscope Set w/ Light & Projector

Model EDU-41002

Includes:

- 9" Microscope w/ Huygens' eyepiece and color filters
- Micro Data Bank®
- Micro Slicer®
- (12) Blank glass slides
- (12) Cover glasses
- (12) Statistical slide covers
- (12) Blank labels
- Vial of eosin
- Vial of methylene blue
- (2) 10mL Graduated cylinders
- (2) Collecting vials
- Tweezers
- Needle
- Scalpel
- Stirring rod
- Condenser lens cap
- Safety goggles
- Spare bulb
- Instruction manual

Requires two (2) "AA" batteries.

$49.95

Ages 10 & up

100x-750x Zoom Microscope Set with Light & Projector
Model EDU-41001

$34.95

Includes:
- 9" Microscope w/ Huygens' eyepiece and color filters
- Micro Data Bank®
- Micro Slicer®
- (12) Blank slides
- (12) Statistical slide covers
- (12) Blank labels
- Petri dish w/ Magnifier
- (4) Collecting vials
- Stirring rod
- Condenser lens cap
- Spare bulb
- Instruction manual

Requires two (2) "AA" batteries

Ages 10 & up

100x • 300x • 600x Microscope Set with Light & Projector
Model EDU-41004

$23.95

Includes:
- 8" Microscope
- (2) Prepared slides
- Micro Slicer®
- (6) Blank slides
- (6) Statical slide covers
- (6) Blank labels
- (2) Collecting vials
- Tweezers
- Stirring rod
- 3x / 6x Magnifier
- Condenser lens cap
- Spare bulb
- Instruction manual

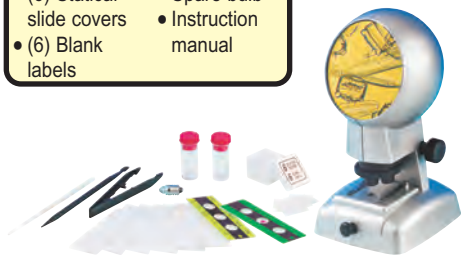
Ages 8 & up

Requires two (2) "AA" batteries

10x • 20x • 30x • 40x Mini Videoscope
Model EDU-36841

$19.95

Includes:
- 7" Videoscope
- (2) Prepared slides
- (6) Blank slides
- (6) Statical slide covers
- (6) Blank labels
- (2) Collecting vials
- Tweezers
- Spatula
- Stirring rod
- Spare bulb
- Instruction manual



Ages 8 & up

Requires two (2) "AA" batteries

100x • 200x • 300x Microscope Set
Model EDU-41003

$14.95

Includes:
- 6" Microscope
- Prepared slide
- (3) Blank slides
- (3) Statical covers
- (3) Blank labels
- 3x / 6x Magnifier
- Instruction manual

Ages 8 & up

No Batteries Required!

Handheld Microscope
Model EDU-37674

$11.95

NEW!

Includes:
- 4" Handheld Microscope
- Prepared slide
- Strap
- Stand
- 20x / 40x Magnifier

Ages 8 & up

Requires three (3) "LR44" batteries

12 pcs Prepared Micro-Slides + 6 Blank Slides
Model EDU-36730

NEW!

$21.95

Includes:
- (12) Slides with 36 assorted specimens (drinks, plastic, synthetic fibers, grasshopper, medicine & starch, micro-film, natural fibers, animal, algae, vitamin & fungi)
- (6) Blank slides

Ages 8 & up

Slide Making Kit
Model EDU-36700

$19.95

Includes:
- Micro Hatchery
- (2) Prepared slides
- (10) Blank slides
- (12) Cover glasses
- (12) Statical slide covers
- (12) Blank labels
- Vial of eosin
- Vial of shrimp eggs
- Vial of methylene blue
- Tweezers
- Dropper
- Stirring rod
- 3x / 6x Magnifier
- Safety goggles
- Vial of sodium chloride
- (2) 10mL Graduated cylinders
- (2) Collecting vials
- Instruction manual

Ages 10 & up

Prepared Micro-Slides
Model EDU-36729

$14.95

Includes: (12) Slides with 36 assorted specimens

Acrylic	Gills Mushroom	Laver Algae	Stem Toadstool
Aspirin	Glucose	Microfiche (3)	Tea
Bird Feather	Grasshopper	Nylon	Vitamin B2
Coffee	Abdomen	Penicillin	Vitamin C
Cola	Grasshopper	PM Foam	Vitamin D
Corn	Leg	Polyester	Wood Fungus
Cotton	Grasshopper	PS Foam	Wool
EVA Foam	Wing	Rice	
Fish Scale	Green Seaweed	Silk	
French Bean	Kelp	Snake Scale	

Ages 8 & up

OWIKIT ALTERNATIVE ENERGY ROBOT KITS

All require assembly, but no soldering

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

Salt Water Fuel Cell Monster Truck

$25.95

Model OWI-752

The Salt Water Fuel Cell Monster Truck Kit is fueled by salt water and is equipped with four-wheel drive mechanical construction. It easily handles different types of terrain by its twisted car body design. It has two transformable engine blocks: V-engine or flat engine. The transparent case design allows children to see the rhythm of the piston in vertical or horizontal position. Each monster wheel can change its angle individually and the truck can change its height and shape. Forward and reverse...no problem; simply switch the "positive and negative" connectors.

Salt Water Fuel Cell Motorcycle

NEW!

$24.95

Model OWI-753

Environmentally safe, non-toxic, and clean - The Salt Water Fuel Cell Motorcycle is the smallest, cheapest and the first motorcycle to be powered by saltwater. The Salt Water Fuel Cell Motorcycle gives children a chance to learn about new forms of clean energy, while building and powering their very own toy: Just add saltwater and go!

After activating the fuel cell module with a saltwater mixture, the magnesium metal sheet can operate the motorcycle for about 5-7 hours continuously. If you want to park the the vehicle, simply take out the fuel cell

Salt Water Fuel Cell Giant Arachnoid

$17.95

Model OWI-751

The Salt Water Fuel Cell Giant Arachnoid Kit gives children a chance to learn about new forms of clean energy, while building and powering their very own toy: Feed it saltwater and watch it scurry away!

Kids will be awed by the remarkable simplicity and outright creepiness its eight-legged movement produces. After activating the fuel cell module with a saltwater mixture, the magnesium metal sheet (3 sheets included) can operate the Spider for about 5-7 hours continuously. Because of these lifelike similarities, the user may want to stop this insectoid. It is easy; simply take out the fuel cell module, rinse with tap water, and dry.

Salt Water Fuel Cell Car

Model OWI-750

$17.95

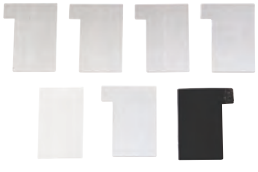
Environmentally safe, non-toxic and clean. The Salt Water Fuel Cell Car is the smallest, cheapest and the first car to be powered by saltwater. The Salt Water Fuel Cell Car gives children a chance to learn about new forms of clean energy, while building and powering their very own toy: Just add saltwater and go!

Kids will be awed by the remarkable simplicity and effectiveness of the toy. After activating the fuel cell module with a saltwater mixture, the magnesium metal sheet (3 sheets included) can operate the car for about 5-7 hours continuously. If you want to park the vehicle, simply take out the fuel cell module and rinse with tap water and dry.

Salt Water Fuel Cell Monster Truck Refill Pack

Model OWI-SP752

$7.95



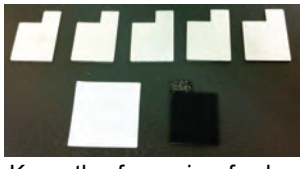
Keep the fun going for hours on end with this refueling pack for your Salt Water Fuel Cell Monster Truck. Included are 5 magnesium plates, 1 air cathode and 1 piece of nonwoven fabric that will keep your monster truck rumbling away.

*Note: This magnesium refill pack is specifically designed ONLY for the Salt Water Fuel Cell Monster Truck OWI752. (Shown above)

Fuel Cell Magnesium Spare Parts Pack

Model OWI-SP750

$5.95



Keep the fun going for hours on end with this refueling pack for your Salt Water Fuel Cell Robot Kits 750, 751, 753. Included are five (5) magnesium plates, one (1) air cathode and one (1) piece of nonwoven fabric that will keep your salt water car racing away.

Eco Biker (wind power)

Model OWI-630

$17.95

The Eco-Biker is your child's own personal wind turbine. Clip it to a bike's handlebars or anywhere with a breeze and watch as the fan powers an LED light

Ages 6-10 & up

ELENCO® SOLAR KITS

(All kits require assembly, but no soldering)

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

Ages 8 & up

Photon Solar Racer Kit

Model AK-590

$35.95

Learn all about solar energy and how to convert it to useful applications. You will build this exciting sleek solar car that runs on a high efficiency solar cell. Have your friends build one too and have fun racing them. No soldering required. The solar car comes in clear plastic. The car can be painted any color scheme that you desire (paint is not supplied).

Car in photo is painted to illustrate how your car could look.

Ages 8 & up

Deluxe Solar Educational Kit

Model SK-40

$22.95

Children can do a series of do-it-yourself experiments to acquire the basic knowledge of solar energy with this kit. They will learn how to make an electrical circuit, make a solar circuit, how to increase voltage and current, and how to use solar power to produce energy for a radio, calculator, battery charger, a cassette player and more!

NEW!

Solar F1

Model 21-667

$24.95

Construct a motorized DIY project using power from a solar cell or one "AA" battery(not included). Learn how motors and automotive transmissions work. Includes a solar cell, plastic body, gears, shafts, motor, and all necessary parts.

Ages 10 & up

NEW!

Astronaut Sun Power Kit

Model 21-665

$24.95

Construct a motorized DIY project using power from a solar cell or one "AA" battery(not included). Learn how motors and automotive transmissions work. Includes a solar cell, plastic body, gears, shafts, motor, and all necessary parts.

Ages 10 & up

Solar Can Motor Robot

Model EDU-37550

$21.95

Assemble a powerful solar "can" motor robot. See how the solar panel generates power! Includes solar panel, electric motor, body plate, robot arms, body rims, wheels, motor case, gears, wires, and instruction manual.

Ages 6 & up

Solar Bottle Motorboat

Model EDU-37551

$21.95

A simple kit designed for future engineers and environ-mentalists. Assemble a powerful solar bottle boat with used plastic bottles. See how the solar panel generates power!

Ages 6 & up

Solar Powered Butterfly

Model EDU-37534

$21.95

Includes a solar panel, electric motor, and all the other necessary parts to build your own solar powered butterfly. Stick it on a sunny window and watch the wings flap! Color manual included.

Ages 8 & up

Solar Powered Rainbow Reflector

Model EDU-37568

$21.95

Fill your room with rainbows every time the sun shines! Includes a solar panel, electric motor, and all the other necessary parts to build your own Rainbow Reflector kit. Color manual included.

Ages 8 & up

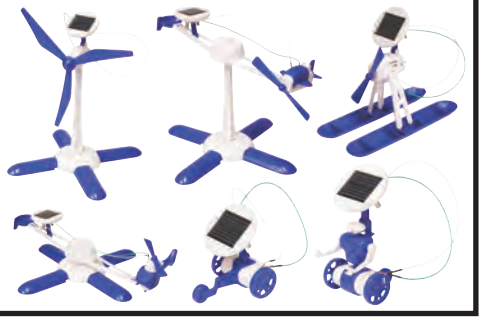
6-in-1 Solar Kit

Model EDU-38006

$19.95

Ages 8 & up

This do-it-yourself solar kit enables children to assemble the parts and transform them into six (6) different types of motor-driven apparatuses actuated by solar power! Apparatuses include Solar Windmill, Solar Airboat, Solar Helicopter, Solar Robot, Solar Airplane, and Solar Wheeler and stand up to 9" tall. This set includes 1 mini motor, 1 solar panel and 44 plastic parts that snap together.



Ages 9 & up

OWIKIT® MINI SOLAR KITS

No soldering required

No batteries required!

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

For the first time, experimenters with little or no experience at all. These handheld kits all move and demonstrate alternative energy principles. No batteries or special tools required for assembly. The included solar cell lasts up to two years! ALL the kits work best outdoors under direct sunlight, but some may work under a 100-watt light bulb or halogen bulb close up.

WALKING KING CRAB — OWI-MSK669

Methodically, eight legs work in harmony to create a ballet style "tippy-toe" movement. Similar to its cousin from Alaska, the sun's rays will make it scurry along to safe passage. If you were thinking about dipping its legs in melted butter and garlic, you'd be disappointed with a mouth full of high density plastic.

$14.95

HAPPY HOPPING FROG — OWI-MSK672

Almost comical, this little green amphibian friend leaps with a joyful sense of freedom. Using its hind legs and rubber feet, Happy Hopping Frog jiggles its eyes as a dog would wag its tail acknowledging its love and appreciation to its owner. The tailless, leaping mini solar kit, activated by the power of the sun's rays.

$14.95

ATTACKING INCHWORM — OWI-MSK673

$14.95

Attacking Inchworm has orange spiky limbs to ward off any predator who seeks to challenge it as a delectable delight. The sun's rays power this mini solar kit to slither along to safety. The mechanical movements simulate the movements of its soft-bodied derivative.

SUPER SOLAR RACING CAR — OWI-MSK671

ZOOOOOOMM! Super Solar Racing Car has surprising speed. One source of such power is derived from the sun's powerful rays of light. Thank goodness, you can control this speedster from any dangerous mishaps by shielding its power source and immediately depressing its brakes to stop. Super Solar Racing Car is easy to assemble and demonstrates alternative energy principles. Less than a dozen parts to assemble.

$11.95

FRIGHTENED GRASSHOPPER — OWI-MSK670

$11.95

Eyes jiggle, legs wiggle, and antennas sway to-and-fro is the combo tango-jitterbug-frightened-grasshopper dance. Pint-sized and power to pack a punch, this enticingly amusing solar bug will surely capture your heart. Turn on its power switch (the sun) and you will smile. This frolicking fancy is easy to assemble and demonstrates an alternative energy principle. Less than ten parts to snap together.

NEW!

Rookie Solar Racer — OWI-MSK661

$7.95

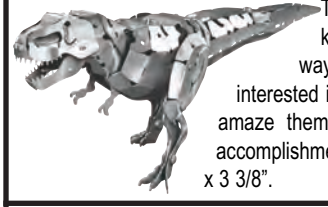
Harnessed by the most powerful and efficient source of energy…the sun. The photovoltaic cell (solar panel) converts the sun's energy directly into electrical energy. Ideal for a do-it-yourself science fair, after-school, or summer workshop project with the bonus gift of learning how automotive transmission and motors work.

Ages 9 & up OWIKIT® ALUMINUM KITS

T-Rex — Model OWI-371

$15.95

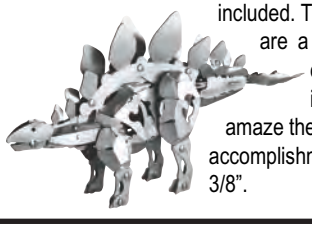
With soft pre-punched aluminum parts, screws, nuts, and assembly tools included. These dinosaur kits are a great way to get children interested in kit building and amaze themselves with their accomplishments. 8 3/8" x 2½" x 3 3/8".



Stegosaurus — Model OWI-372

$15.95

With soft pre-punched aluminum parts, screws, nuts, and assembly tools included. These dinosaur kits are a great way to get children interested in kit building and amaze themselves with their accomplishments. 8½ x 1" x 4 3/8".



Triceratops — Model OWI-373

$15.95

With soft pre-punched aluminum parts, screws, nuts, and assembly tools included. These dinosaur kits are a great way to get children interested in kit building and amaze themselves with their accomplishments. 8" x 2¼" x 3 3/8".

Mega Mantis — Model OWI-351

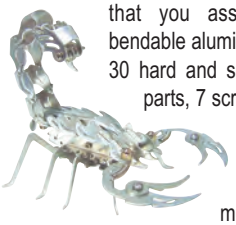
$13.95

Almost lifelike, OWI's aluminum insect building kit features a praying mantis insect that you assemble from metal and bendable aluminum parts. The kit contains 25 hard and soft pre-punched aluminum parts, 7 screws, 7 nuts, 4 metal springs, and even assembly tools are included. 7" x 4" x 4.5".

Samurai Scorpion — Model OWI-352

$13.95

Almost lifelike, OWI's aluminum Scorpion that you assemble from metal and bendable aluminum parts. The kit contains 30 hard and soft pre-punched aluminum parts, 7 screws, 7 nuts, 3 springs, and even assembly tools are included. Its claws, arms, legs, and tail are all moveable. 6.5" x 3.5" x 3".



Rhino Beetle — Model OWI-353

$13.95

Almost lifelike, OWI's aluminum beetle building kit is a cool to build the 26 hard and soft pre-punched aluminum parts, 4 screws, 4 nuts, and 7 springs with the assembly tools that are included. Rhino Beetle's legs, wings, and horn are all moveable.

Ages 9 & up

OWIKIT® MINI SOLAR KITS

No soldering required

No batteries required!

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

For the first time, experimenters with little or no experience at all. These handheld kits all move and demonstrate alternative energy principles. No batteries or special tools required for assembly. The included solar cell lasts up to two years! ALL the kits work best outdoors under direct sunlight, but some may work under a 100-watt light bulb or halogen bulb close up.

OWI The Solar System

OWI-MSK679

$21.95

Young astronomers will delight in OWI's newest Mini Solar Kit – as they build, paint and watch their very own Solar System come to life with real solar energy. Planets orbit around the solar-paneled "sun" that drives a motor so the planets actually move. The kit comes with 6 colors of opaque acrylic paint, plus brush.

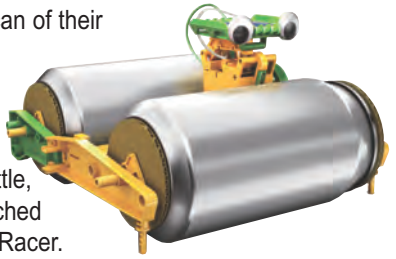
NEW!

Super Solar Recycler

OWI-MSK616

$19.95

The Super Solar Recycler Kit is powered completely by natural light so you never have to worry about batteries. Your children can recycle a can of their favorite soft drink to create Street Roller and Walking Robot, create Bottle Yacht, Drummer Robot and Flying Bird using a plastic water bottle, and even turn your old scratched CD's into the super cool CD Racer.



NEW!

Penguin Life

OWI-MSK691

$19.95

Young astronomers will delight in OWI's newest Mini Solar Kit – as they build, paint and watch their very own Solar System come to life with real solar energy. Planets orbit around the solar-paneled "sun" that drives a motor so the planets actually move. The kit comes with 6 colors of opaque acrylic paint, plus brush.

NEW!

Green Life

OWI-MSK690

$19.95

Kids can build an eco-friendly and Green Life future. They can see the benefits of putting solar energy to work and discover how solar cells generate electricity from light. The kit consists of a powerful solar cell, rechargeable battery (included), house, and car. It is easy to assemble: no screws, nuts, or fuss. Just simply plug-in the car into the house, solar energy converts into electric power for storage and application.

Aerial Cable Car

OWI-MSK676

Aerial Cable Car power grid system is simple: bright sun – "power on", little or no sun – "power off". Transport cable, automatic round trip return stoppers, solar panel and 30 plastic parts to assemble are included. It challenges young people to be technically precise with miniature parts. Clear easy-to-follow instructions; and teaches students to follow precise visual diagrams.

$19.95

Sonic F1

OWI-MSK674

The perfect balance of aerodynamics, transmission, speed, and stylish design has made SONIC F1 the top prospect in the racing community. When equipped with the most power engine, the sun, Sonic F1 races at amazing speeds. It consumes no fossil resources making it an educational tool that teaches alternative energy concepts. Easy-to-build and fun to play. Have hours of fun experimenting with it in the sun. Eight plastic parts to assemble.

$17.95

Peppy Orangutan

OWI-MSK675

$17.95

Always introducing unique products, OWI has outdone itself with a brand new mysterious solar kit that traverses across ropes, hand-over-hand like a monkey. Only 15 plastic parts to assemble. Clear easy to follow instructions. PEPPY Orangutan can motivate students to learn about micro-robotics and solar energy. It also teaches students to follow precise visual diagrams.

OWI Solar Bullet Train

Model OWI-MSK680

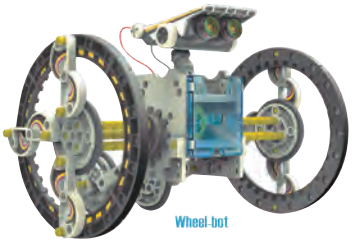
$14.95

Two interlocking cars attach to the engine, allowing young builders to focus on self-motivation, perseverance and manipulation. The Solar Bullet Train is an excellent beginner building kit designed to teach how solar power is used to drive a small motor. Its 18 parts snap together and are secured with only four screws. Train enthusiasts of all ages will enjoy building this amazingly fast eco-friendly train and watch it travel without rails.

OWIKIT® SOLAR KITS

(All kits require assembly, but no soldering)

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.



NEW!

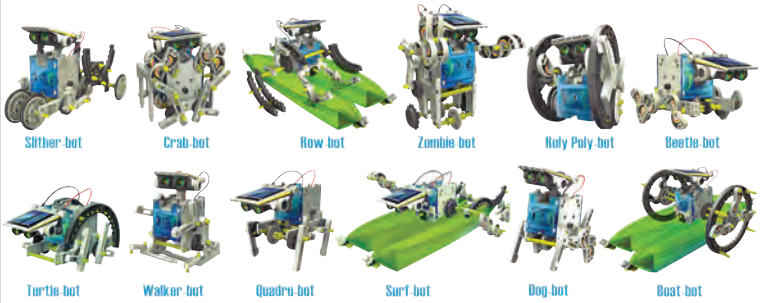
14 in 1 KIT EDUCATIONAL SOLAR ROBOT

OWI-MSK615

Best Green DR. TOYS 2013

AWARD WINNING

$34.95



The solar powered robot MSK615 can be transformed into 14 different robot modes which include a multitude of comical and functional movements. The user can easily change from a wagging-tail dog -> running beetle -> walking crab -> surfer -> speedster -> zombie chaser… The robot kit provides unique accessories (included) and parts that make the robot move on land and water.Fortunately, this product is powered by the sun, so there are no batteries required.

There are two levels in building the robot kit. Level one includes: Turtle-bot, Beetle-bot, Quadru-bot, Boat-bot, Walker-bot, Dog-bot, and Wheel-bot. After they amuse themselves with the entry level, can challenge their manipulative skills with second level: Roly Poly-bot, Auto-bot, Slither-bot, Surf-bot, Zombie-bot, Crab-bot, and Row-bot. Additional features includes: adjustable polarity on the solar panel to change direction of motor rotation, retractable robot head which can be quickly stored in the upper body, the robot head can be installed in the front, top or rear of the gearbox, and a transparent housing to see the movements of the gears. With 14 in 1 Educational Solar Robot Kit, let them learn about their future and have fun doing it with.

OWI 7-in-1 Solar Space Fleet

OWI-MSK641

$28.95

The Solar Space Fleet Kitis an innovative solar powered science kit that can transform into seven different lunar modules and energized via direct sunlight or micro rechargeable battery. The micro rechargeable battery can be charged in two ways by direct sunlight or by alkaline batteries.

OWI 7-in-1 Rechargeable Solar Transformers

OWI-MSK640

$26.95

It features all snap together plastic parts (no screws, tools required), solar panel and accessories. It is incredibly easy to assemble the 7 different modules: 2 power charging stations and 5 different vehicles. The transforming rechargeable station has 2 output plugs; one for solar recharging and the other for battery recharging.

OWI 6-in-1 Educational Solar Kit

OWI-MSK610

$21.95

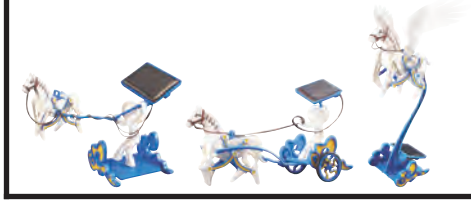
The 6-in-1 Educational Solar Kit, an excellent beginner building kit designed to teach how solar power is used to drive a small motor. Children use the 21 snap together parts (no tools required) to build six different working models: airboat, windmill, puppy, car and two planes.

OWI 3-in-1 Solar Stallion

OWI-MSK613

$21.95

Triple your fun in the sun with 3-in-1 Solar Stallion. This solar-powered kit helps kids understand the benefits of renewable energy while creating their own fun, battery-free toy. Three easy-to-build equine choices: 'Horse Trainer', 'Pegasus', or 'Chariot'.



OWI 3-in-1 T3 Transforming Solar Robot

OWI-MSK614

$21.95

"T3" easily transforms into three intergalactic designs: Tank, Robot, and Scorpion. Easy instructions and basic building skills are that's needed for young science fiction buffs to see the benefits of solar energy before their very eyes.

OWI 4-in-1 T4 Transforming Solar Robot

NEW!

OWI-MSK617

$19.95

This kit gives your child the option to easily transform between one of four different modes: Robot – walking legs as well as moving wheels, Insecta – 6 walking legs as well as moving jaws, T-Rex - 2 walking legs and moving jaws, and Drill Vehicle – similar to a miner's driller/drilling bit and moving wheels.

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(Continued on other side)

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ROBOT KITS
(All require assembly, but no soldering)

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

ROBOTIC ARM EDGE OWI-535
(Wired Control)

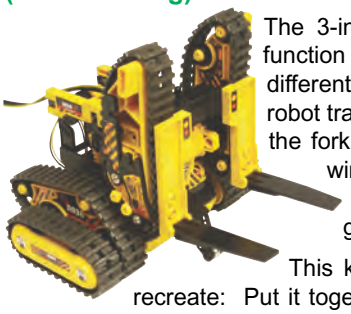
$61.95

Command the gripper to open and close, wrist motion of 120°, an extensive elbow range of 300°, base rotation of 270°, base motion of 180°, vertical reach of 15 inches, horizontal reach of 12.6 inches, and lifting capacity of 100g. WOW! Some of the added features include a search light design on the gripper and a safety gear audible indicator is included on all five gear boxes to prevent any potential injury or gear breakage during operation. Total command and visual manipulation using the "5's": five-switch wired-controller, five motors, and five joints. Dimensions: 9" (H) x 6.3" (W) x 15" (L)

Requires four (4) "D" batteries.

3-IN-1 ALL TERRAIN ROBOT OWI-536
(Transforming)

$57.95



The 3-in-1 All Terrain Robot is a multi-function tracked mobile robotic kit. Utilize different track modules and make your robot transform into 3 amazing variations: the forklift, rover, and gripper. Using the wired controller, command the robot to move forward, backward, turn, grip and lift.

This kit allows students to create and recreate: Put it together, take it apart, make another module…It's all about flexibility, and intelligent thinking. But luckily, kids don't have to be robotics engineers to create and achieve. With the 3-in-1 All Terrain Robot, they learn as they play.

Requires four (4) "AA" batteries.

USB INTERFACE CABLE & SOFTWARE (OWI-535)
OWI-535USB

Have real time manual control of the robotic arm and program the arm to perform a sequence of movements.

(Windows®-based)

$43.95

OWI ROBOT ACTIVITIES & EXPERIMENTS
EXP-535

Provides multiple step-by-step activities and experiments for the Robotic Arm Edge robot in both manual and computer modes.

$23.95

OWI Green Energy & Robotics Technology Curriculum
OWI-GRNCUR

Challenge young minds to grow through further explortion of fast-changing worlds of green energy and robotics

$11.95

BINARY PLAYER ROBOT OWI-9875
(Programmable, Infrared Sensor)

$39.95

Binary Player Robot is controlled by black and white patterns on a disk, which are read by an infrared sensor. Particular patterns activate either of two wheels to turn left, right, forward, or pause. These on/off commands illustrate the basic principles of binary coding. To change a movement program, the operator simply creates a new disk pattern. Set your course and explore the fascinating world of Binary Player Robot!

Easy to assemble, this OWIKIT Intermediate building level robot makes a great entrant for robotic competitions, science fair projects, robotic workshops, after-school programs, special events, gifts, science enrichment camps, and classroom activities.

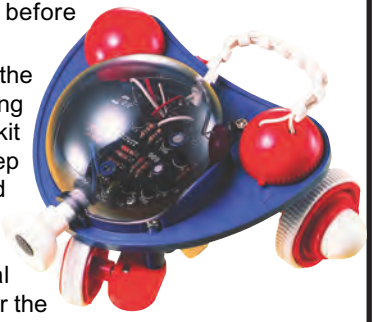
Requires two (2) "AA" batteries.

HYPER PEPPY OWI-969
(Sound/Touch Sensor)

$35.95

Explore the fundamentals of robotics with this informative and entertaining robot kit. Hyper Peppy is an intelligent robot with a touch/sound sensor. If it comes in contact with an object or hears a loud noise (such as hands clapping), Hyper Peppy automatically reverses, then turns left before embarking on a new course.

Hyper Peppy is lots of fun from the moment is arrives. Requiring only basic hand tools, the kit contains complete step-by-step instructions, pre-assembled printed circuit board, condenser microphone, and an easy-to-assemble mechanical drive system. It's an ideal gift for the hobbyist or budding scientist.



Requires two (2) "AA" batteries.

JUNGLE ROBOT OWI-9870
(Sound Sensor)

$34.95

Jungle Robot traverses "hand over hand" like an orangutan or walks on the ground like a gorilla. A condenser microphone and printed circuit board controls your multi-function friend. When you think jungle robot is asleep, just cry "Wake UP!" Your robot will immediately start climbing or walking for a pre-set time and reset itself waiting for another command.

Educators, science museums, and hobbyist will surely appreciate the durability, educational value, and endless hours of amusement for children and adults too!

Requires two (2) "AA" batteries.

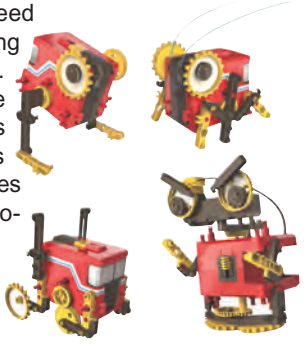
EM4 ROBOT OWI-891
(Motorized)

$19.95

NEW!

A boost in confidence - the EM4 Educational Motorized Robot Kit is your 3-speed vehicle to positively impact a young builder by using OWI's robotics theory. OWI has designed this kit for the lovers of simplicity. Everything from its compact easy-assembly design to its need for only one "AA" battery provides your child with a fun and easy-to-assemble robotic playmate.

A child can bring EM4 Educational Motorized Robot Kit to life in one of its four exciting modes: Cricket, Beast, Trailer, and good ole Grandpa-bot.



Requires one (1) "AA" battery.

Robotics

Model EDU-7090

Join forces with the world of robotics and assemble 3 fantastic robots. One robot detects objects using infrared rays (EDU4004), the wake-up robot is sensitive to light (EDU4003) and the third robot is operated by any TV remote control (EDU4001). A separate circuit and body are supplied for each robot: just fix the selected circuit onto the robot base (chassis) and add the corresponding transparent body.
No soldering required.

$45.95

Best Seller

(Only one robot can be built at a time)

Requires two (2) "AA" batteries.

Remote Control Robot

Model EDU-4001

$19.95

Build your own remote control robot controlled by your TV remote! The kit also includes parts for inventing your own robot arm.
No soldering required.

Requires two (2) "AA" batteries.

Treasure Finder

Model EDU-4002

$19.95

Find hidden riches with this treasure finder robot! This robot uses a metal detector to discover metallic objects.
The kit also includes parts for inventing your own robot arm.
No soldering required.

Requires two (2) "AA" batteries.

Wake Me Robot

Model EDU-4003

$19.95

The Wake Me Robot uses a light sensor, making it sensitive to light. The kit also includes parts for inventing your own robot arm.
No soldering required.

Requires two (2) "AA" batteries.

The Guide Robot

Model EDU-4004

$19.95

The Guide Robot senses objects in its path using an infrared ray. The kit also includes parts for inventing your own robot arm.
No soldering required.

Requires two (2) "AA" batteries.

ELENCO® ROBOT KITS

(All require assembly, but no soldering)

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

Radio Controlled Titan Tank Kit

Model 21-531N2 (two pack)

The Titan Tank is an infrared remote control kit. Its microprocessor provides four different channels that allow up to four Titans to fight each other at the same time. Makes a sound when shooting and when it is hit. The Titan moves using six wheels that can move forward, backward, right and left.

$104.95

Model 21-531N2
(two pack)
SAVE $15!

$59.95

Model 21-531N
(One Pack)

Requires four (4) "AA" and four (4) "AAA" batteries.

Radio Controlled Robot Beetle Kit

Model 21-534N

The Beetle is an infrared remote control kit. Its microprocessor provides four different channels that allow up to four Beetles to operate at the same time. Two motors operate the open, close, lift and lower functions of the large pinchers in the front. The Beetle moves using six wheels that can move forward, backward, right and left. This kit is ideal for learning about gear structure, motor principles, and electronic circuits.

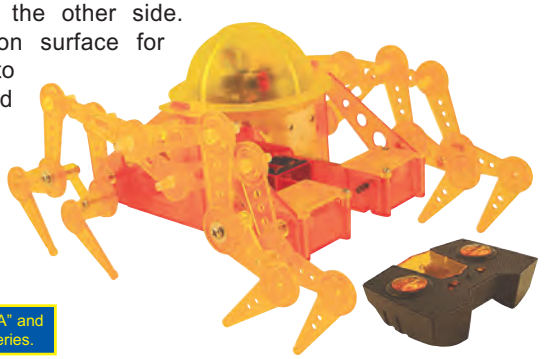
$69.95

Requires four (4) "AA" and four (4) "AAA" batteries.

Radio Controlled Space Nine Kit

Model 21-532N

The Space Nine is an eight-legged star explorer. Use the remote control to make it move and turn. The Space Nine can walk on rough surfaces, turn left, right and even cross rocks. When it moves, its first and third legs on one side of its body move with the second and fourth leg on the other side. Create a moon surface for Space Nine to explore and enjoy the fun!



$59.95

Requires four (4) "AA" and four (4) "AAA" batteries.

Follow Me

Sound Detecting Robot

Model 21-887

$41.95

A very interesting sound detecting robot kit. The four built-in microphones detect the sound source and the robot turns and moves towards it. Just clap and the robot will come to you. Clap again from another position, and the robot will turn and move in that direction.

Requires four (4) "AAA" batteries.

Line Tracking Robot

Light Sensor Robot Kit

Model 21-890

$29.95

The Line Tracking Robot will follow a black line drawn on white paper by using two photo interrupters. Create different routes with black electronic tape or a black marker and see what your Line Tracking Robot can do!

Requires four (4) "AAA" batteries.

Ages 12 & up

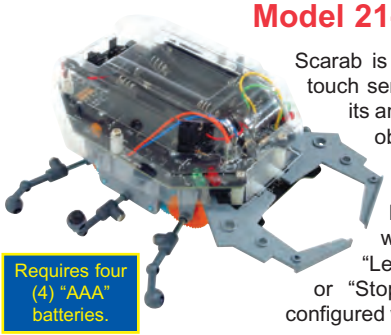
ELENCO® ROBOT KITS

(All kits on this page require soldering assembly)

The following warning pertains to all products on this page: WARNING: CHOKING HAZARD Small parts. Not for children under 3 years.

Scarab Robot Kit
Model 21-884

$44.95



Scarab is a robot that makes use of two touch sensors to detect obstacles. When its antennal (touch sensor) detects an object in its path, Scarab will go backward first and automatically follow a two-step maneuver to help it overcome the obstacle, which can be a combination of "Left Turn", "Right Turn", "Reverse", or "Stop". The Scarab robot can be configured with different sets of movements.

Requires four (4) "AAA" batteries.

Escape Robot Kit
Model 21-886

$44.95

Escape Robot kit works just like an A.I. robot. It never fails to find its way out of a maze. The Escape Robot makes use of three infrared emitting diodes and one infrared receiving module to send and receive signals and detect obstacles. Escape Robot has a built-in microprocessor which enables it to "think" on its own, as it processes information about its environment and maneuvers itself around obstacles. Escape Robot moves on six legs. The kit comes complete with two sets of differently designed legs, which provides endless fun and excitement with its different sets of movements.

Requires four (4) "AAA" batteries.

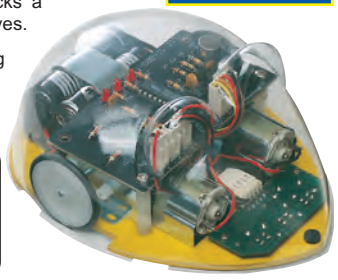
Line Tracking Mouse Kit
Model 21-880

$39.95

Requires four (4) "AA" batteries.

How Magical! A smart Robot Mouse tracks a black line using a photo interrupter for its eyes.

How Funny! Create a twisting and turning road layout yourself with black tape on a white background. See how it tracks the black line to find the target.

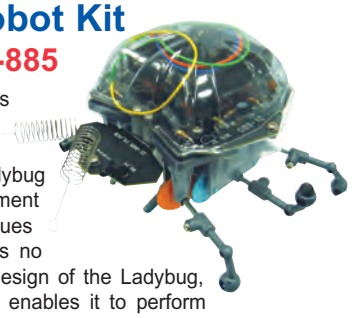


Features

- Sound activated
- Uses three photo interrupters to detect a black line.
- Two sets of gear motors (unassembled)
- Programmed integrated circuit (IC)

Ladybug Robot Kit
Model 21-885

$32.95



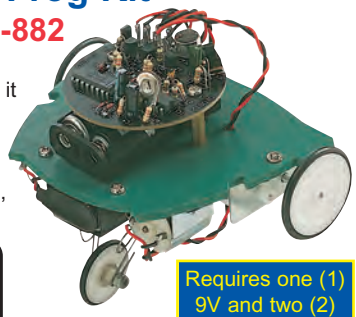
Ladybug Robot moves with its six legs and makes use of infrared emitting diodes as its "eyes" to avoid obstacles along its path. Ladybug automatically makes a left turn the moment it detects an object in its path. It continues to move forward after that if there is no shadow in front of the sensor. The design of the Ladybug, which is based on two sets of legs, enables it to perform different sets of movements, thereby providing endless fun and excitement.

Requires four (4) "AA" batteries.

Turning Frog Kit
Model 21-882

$26.95

This is an interesting robot kit. When it detects sounds, it will move and repeat the following steps sequentially: Start (move forward), Stop, Left Turn, Stop, Right Turn, Stop.



Features

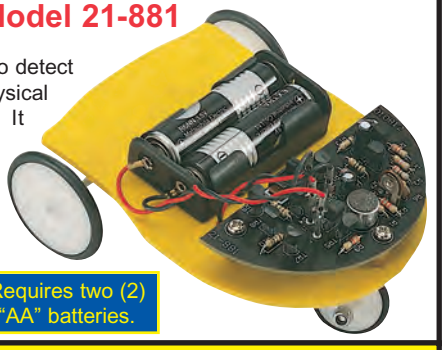
- Two sets of gear motors (unassembled)
- Programmed integrated circuit (IC)

Requires one (1) 9V and two (2) "AA" batteries.

Sound Reversing Car Kit
Model 21-881

$21.95

A Robot Car with a sensor to detect noise (like a clap) or physical contact for its reaction. It moves forward when it detects noise and reverses when it touches obstacles.



Features

- Uses a microphone as a sound sensor.

Requires two (2) "AA" batteries.

Ages 12 & up

velleman® ROBOT KITS

(soldering assembly required)

Crawling Microbug
Model MK165

$29.95

Requires two (2) "AAA" batteries.

Attractive bug-shaped miniature robot. The microbug is always hungry for light, it drives towards it.

Specifications

Power supply: Two (2) 1.5V "AAA" battery operation (not included)

Dimensions: 5.2" (L) x 2" (W) x 3.5" (H)

Features

- Two open chassis sub-miniature motors.
- Adjustable light-sensitivity suits almost any light condition and allows to control its "bug-like" behavior.
- Adjustable speed
- Choose between two different walks
- LED "eyes" indicate driving direction
- Stops in total darkness

Crawling Microbug
Model MK129

Attractive, bright-colored, bug-shaped miniature robot. The microbug is always hungry for light, it drives towards it.

Requires two (2) "AAA" batteries.

Specifications

Power supply: Two (2) 1.5V "AAA" battery operation (not included)

Dimensions: 4.3" (Ø) x 3.5" (H)

$15.95

Features

- Two open chassis sub-miniature motors.
- Adjustable light-sensitivity suits almost any light condition and allows to control its "bug-like" behavior.
- Adjustable speed
- Choose between two different walks
- LED "eyes" indicate driving direction
- Stops in total darkness

Running Microbug
Model MK127

Requires two (2) "AAA" batteries.

$11.95

Specifications

Power supply: Two (2) 1.5V "AAA" battery operation (not included)

Dimensions: 4" (L) x 2.4" (W)

Attractive, bright-colored, bug-shaped miniature robot. The microbug is always hungry for light, it drives towards it.

Features

- Two open chassis sub-miniature motors.
- LED "eyes" indicate driving direction
- Stops in total darkness
- Adjustable light-sensitivity suits almost any light condition and allows to control its "bug-like" behavior.

ELENCO® SOLDER PRACTICE KITS

Learn how to solder!

Hands-on Basic Electronics Kit

Model SKM-250 with Training Course

$49.95

A basic hands-on kit that introduces you to good soldering techniques while working on state-of-the-art printed circuit board circuits. You will learn the basics of digital multimeters and circuit troubleshooting.

Some of the features of this kit are as follows: Identifying components, color-code reading exercises, resistors, capacitors, and inductors; includes color code calculator (Model CC-100); 163 solder points, standard soldering connections, close-tolerance soldering, and tack soldering; complete voltage and resistance analysis of circuit; desoldering exercise.

This kit requires soldering.

Includes
- **SL-75** Variable temperature station with conical tip
- **SL-75T2** Extra wedge tip
- **M-1000E** Digital multimeter
- **SP-3B** Solder practice kit
- **ST-3** Adjustable wire stripper cutter
- **SE-1** Solder ease kit

Color Code Calculator
Model CC-100

Cardboard carrying case with handle included!

Requires two (2) 9V batteries.

Fundamentals of Soldering Kit

NEW!

Model SK-275

$49.95

Use this kit to learn or just brush up on your soldering skills. Kit includes soldering station, tools and solder practice board.

Color Code Calculator
Model CC-100

Cardboard carrying case with handle included!

Includes
- SL75 - Elenco® Variable Temperature Soldering Station
- SL75T2 - additional wedge tip
- ST1 - Diagonal Cutter
- ST2 - Mini Long Nose Pliers
- ST20 - Safety Goggles
- ST30 - Premium Wire Stripper
- SE1 - Solder Ease 4 Piece Kit
- SP4 - Desoldering Pump
- SP1A - Elenco Learn to Solder - Practical Soldering Project Kit

Practical Soldering Project Kit

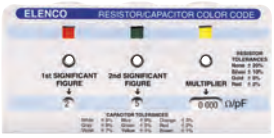
Model SP-3B with Training Course

$9.95

ELENCO® is proud to present another superb solder practice kit designed to meet the ever increasing demands on proper soldering procedures. Some of the features of this kit are as follows:

- Identifying components
- Color code reading exercises, resistors, capacitors, and inductors.
- 163 solder points, standard soldering connections, close-tolerance soldering, and tack soldering.
- Desoldering exercise
- Evaluation exam of performed soldering connections. Written & visual.
- Complete voltage and resistance analysis of circuit.

Includes color code calculator.



Requires one (1) 9V battery.

WEAR SAFETY GLASSES

see page 65

Practical Soldering Project Kit

Model SP-1A with Training Course

$9.95

Working with printed circuit boards is in the future of every electronic technician. Almost every electronic device today has a printed circuit board and whether you are assembling a PC board or repairing it, you must understand the basics of working with these boards. Good soldering requires practice and an understanding of soldering principles. This solder practice project will help you achieve good soldering techniques, help you become familiar with a variety of electronic components, and provide you with dynamic results.

Requires one (1) 9V battery.

Deluxe How to Solder Kit

Model SK-175 with Training Course

$34.95

Learn how to solder properly using a variable temperature solder station providing a temperture range of 350°F to 900°F. It will provide the correct temperture for the broad range of electronic components that are present in today's electronic equipment.

This kit requires soldering.

Includes
- **SL-75** Variable temperature station with conical tip
- **SL-75T2** Extra wedge tip
- **SP-1A** Solder practice kit
- **ST-1** Side cutting pliers
- **SE-1** Solder ease kit

Cardboard carrying case with handle included!

Requires one (1) 9V battery.

Learn to Solder Kit

Model AK-100

$16.95

This kit is a must for the beginner. After practicing your soldering techniques on the special area of the board, you'll be ready to assemble this European siren with flashing LEDs. This kit also includes a soldering iron and wire cutters.

This kit requires soldering.

Soldering Iron
SR-1N

Wire Cutter
ST-1

SP-1A

Requires one (1) 9V battery.

Ages 12 & up ELENCO® EDUCATION KITS

(All kits require soldering)

Quantity Discounts Available . . . CALL!

Complete with PC Board and Instruction Book

Space War Gun
Model K-10 — $8.95

This gun gives you realistic sounds and flashes you expect in a Space Gun. Produces rapid fire or single shot with two flashing LEDs.

Requires one (1) "9V" battery.

Christmas Tree
Model K-14 — $13.95

Produces flashing colored LEDs and three popular Christmas melodies!

Requires one (1) "9V" battery.

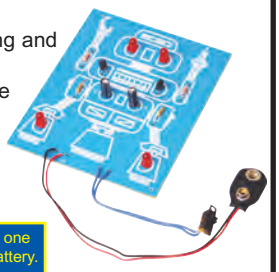
Electronic Cricket
Model K-16 — $8.95

The Electronic Cricket is the perfect project and fun game for family and friends. You will drive your friends crazy trying to find it!

Requires one (1) "9V" battery.

LED Robot Blinker
Model K-17 — $8.95

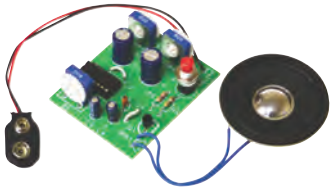
With the LED Robot Blinker, you will learn about free-running oscillators. You'll have fun building, displaying and learning about the LED Robot Blinker.



Requires one (1) "9V" battery.

Digital Bird
Model K-19 — $8.95

There are all kinds of birds in this world, singing all kinds of songs. But neither you nor they probably have heard anything quite like this!



Requires one (1) "9V" battery.

Yap Box
Model K-22A — $11.95

Makes six exciting sounds:

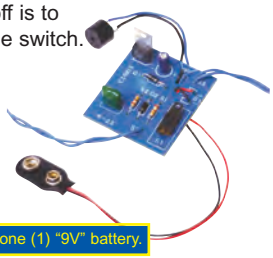
- Laser Gun
- Diesel Horn
- Siren
- Wolf Whistle
- Puppy Bark
- Machine Gun

Case Included.

Requires one (1) "9V" battery.

Burglar Alarm
Model K-23 — $8.95

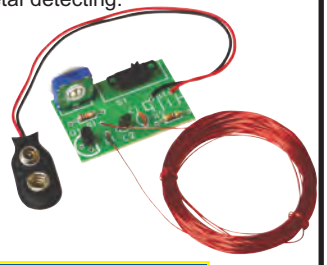
The Burglar Alarm is an easy-to-build alarm control for your car, house, room, or closet. After the alarm is on, the only way to turn it off is to open the switch.



Requires one (1) "9V" battery.

Metal Detector
Model K-26 — $8.95

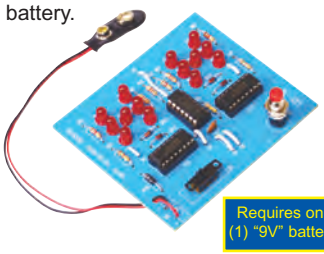
Find new money and old treasure. Get started in the fascinating hobby of metal detecting.



Requires one (1) "9V" battery.

Pocket Dice
Model K-28 — $11.95

The Pocket Dice is a handy little project to be used with any game of chance. Since it uses CMOS circuitry, it has the advantage of operating off a 9-volt battery.

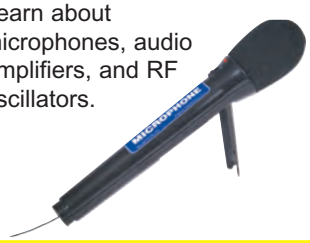


Requires one (1) "9V" battery.

FM Microphone Kit
Model K-30/ AK-710 — $13.95

With training course

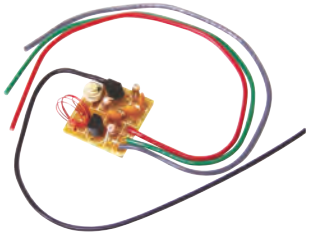
Transmit your voice on any FM radio. Range up to 100 feet. Learn about microphones, audio amplifiers, and RF oscillators.



Requires two (2) "AA" batteries.

Telephone Bug
Model K-35 — $8.95

Our bug is only the size of a quarter, yet transmits both sides of a telephone conversation to any FM radio. No battery needed.



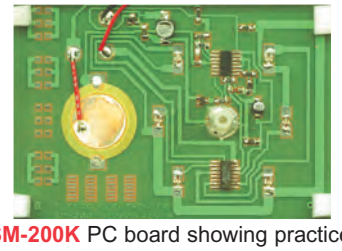
Sound Activated Switch
Model K-36 — $10.95

Clap your hands together twice and the light comes on, clap again twice and off it goes. Many other uses. Complete with microphone.

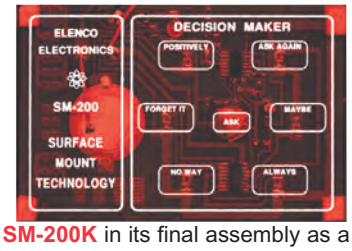
Requires one (1) "9V" battery.

Surface Mount Technology Solder Practice Kit
Model SM-200K **with Training Course** — $21.95

The future of electronics is headed for miniaturization through surface mount technology (SMT). Taking our course of training will prepare you for the future. Includes all parts and instructions to give you experience on working with surface mount components. The finished project is a decision maker with 6 flashing LEDs to help you make vital decisions.



SM-200K PC board showing practice areas & mounted components



SM-200K in its final assembly as a decision maker

Requires one (1) 9V battery.

Electronic Christmas Tree
MK100

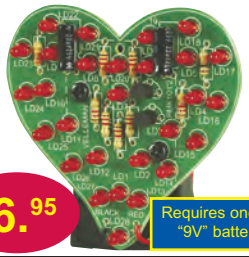
Christmas was never so congenial! 16 blinking LEDs.
* Very low power consumption: max. 4mA.

$7.95

Requires one (1) "9V" battery.

Flashing LED Sweetheart
MK101

Show your love in an original way that your heart still beats faster for him or her. 28 LEDs form 2 blinking hearts.

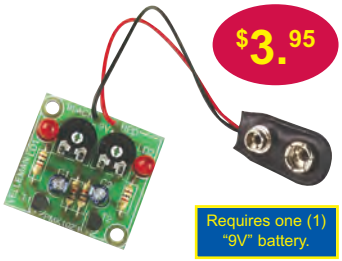


$6.95

Requires one (1) "9V" battery.

Flashing LEDs
MK102

For different applications (such as model construction), and recreational. Adjustable flashing speed with two potentiometers.

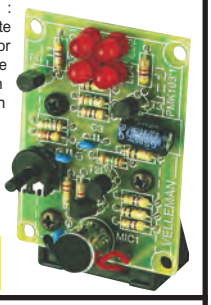


$3.95

Requires one (1) "9V" battery.

Sound to Light Unit
MK103

Four high-intensity LEDs light up and react simultaneously on every sound. For different funny and practical applications, such as : sound indicator, simple sound-to-light unit for music, for the hearing impaired : can be used to indicate the telephone, door bell. Adjustable sensitivity with potentiometer. Built-in microphone.



$6.95

Requires one (1) "9V" battery.

Electronic Cricket
MK104

Can be used for fun or to simulate a hot summer night. Automatically comes on when it gets dark. Cricket repetition (time between two crickets), effect and tone adjustable. Adjustable light sensitivity.

$8.95

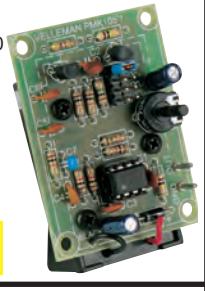
Requires one (1) "9V" battery.

Signal Generator
MK105

Signal output: sine wave, triangle, square wave and integrator (selectable through jumper).

Signal frequency: about 1kHz (fixed)

Output level: adjustable from 0 to 100mVrms (LEVEL potentiometer)

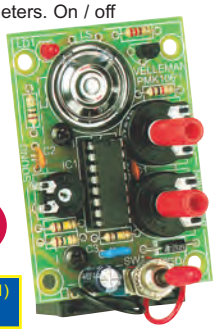


$7.95

Requires one (1) "9V" battery.

Metronome
MK106

Speaker included. LED beat indication. Adjustable volume and beats / minute with potentiometers. On / off switch on board.



$12.95

Requires one (1) "9V" battery.

LED Running Light
MK107

8 LEDs. Different LED running effects are selectable (PROG push button). Adjustable effect speed (SPEED potentiometer). Power stand-by push button (OFF push button).

$11.95

Requires one (1) "9V" battery.

Water Alarm
MK108

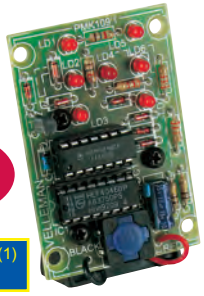
Gives alarm sound when water is detected. Incorporated alarm buzzer. Water sensor can be placed at a distance by cutting the board and using wires to connect the sensor.

$5.95

Requires one (1) "9V" battery.

Electronic Dice
MK109

Electronic die with LED indication. Rolls slowly out when the push button is released.

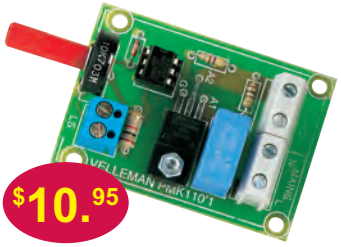


$9.95

Requires one (1) "9V" battery.

Simple One Channel Light Organ
MK110

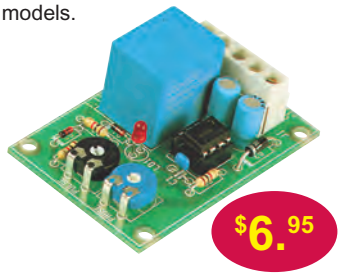
With loudspeaker input. Modulates a lamp according to the music signal at the input. Optical isolated loudspeaker input. Adjustable sensitivity.



$10.95

Interval Timer
MK111

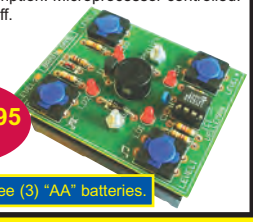
For intermittent operation of circuits and equipment. Blinking light, video/photo single frame shooting, slide projector control, miniature models.



$6.95

Brain Game
MK112

Just 4 LEDs and 4 push buttons provide hours of fun. The aim-of-the-game is to repeat a pattern, which is generated at random. The pattern is played both visually and audible or visually only (selectable). It features 4 difficulty levels, which can be selected at start-up. The replay speed gradually increases during the game, to make it even more challenging. Low power consumption. Microprocessor controlled. Auto power off.

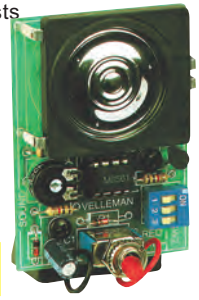


$10.95

Requires three (3) "AA" batteries.

Siren Sound Generator
MK113

Generates four different sounds: police siren, fire brigade, emergency vehicle, and laser gun. RV1 adjusts sound pitch. On/off switch and PCB speaker included.



$13.95

Requires one (1) "9V" battery.

Riding Santa
MK116

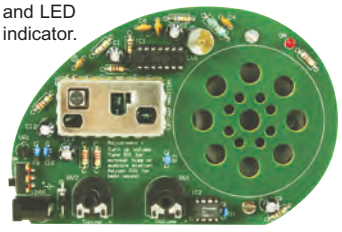
$29.95

126 LED multicolor animated Xmas gadget. No need to remove battery when using external supply. 12V operation possible for use in cars, trucks. On/off switch included.

FM Radio
MK118

$29.95

Double fun: building and listening! Easy-to-assemble with no coils to wind. One single adjustment; pre-assembled and tested FM front end. Receives the complete FM band: 88-108 MHz. Includes ON/OFF switch, volume control and LED indicator.



We can special order products from www.vellemanusa.com not shown here for you! Just call or e-mail for a quote.

Roulette
MK119

37 LEDs. Spinning sound. 'Winner'-tune for each color. Spins LEDs between games. Pushbutton operation. Microprocessor technology.

$24.95

Requires three (3) "AA" batteries.

Light Barrier
MK120

Applications: announce visitors, warn against burglars, set boundaries, for science projects, etc.

$10.95

Requires three (3) "AA" batteries.

Classic TV Game
MK121NTSC

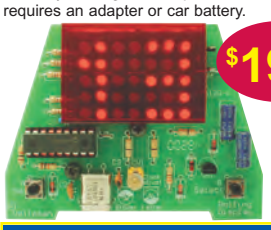
This kit will remind you of the original video ping-pong game!

$21.95

Requires three (3) "AA" batteries.

Rolling Clock
MK123

Nicely animated rolling time and date display. Graphic display with 35 LEDs. Select hours, minutes, month or day with SELECT and enter the values with SET. Time display in 12h-mode (24h-mode when setting clock). Fine-tune the clock by turning CV1. Operates on 9-12VDC; requires an adapter or car battery.



$19.95

Requires one (1) "9V" battery for back-up.

Light-sensitive Switch
MK125

Switch-on at dusk, turn off at dawn, fully automatic.
Wide-range adjustable sensitivity. Delay circuit avoids cycling.

$9.95

Kitchen Timer
MK128

One minute to one hour timing. Single button, straight-forward operation. Clear 16-LED readout. Audible and visible alarm with discrete pre-alarm. Auto power-off. Attractive designer enclosure.

Requires three (3) "AAA" batteries.

$21.95

3D Xmas Tree
MK130

Six flashing red LEDs. Extra green and yellow LEDs provided to customize your tree. Can be hung and supplied through the wires.

$10.95

Requires one (1) "9V" battery.

Traffic Light
MK131

Miniature traffic light as used on four-way junctions. Realistic operation with adjustable delay. 12 LEDs. Great for model railroads, exhibitions, as a toy, etc.

$10.95

Requires one (1) "9V" battery.

Cable Polarity Checker
MK132

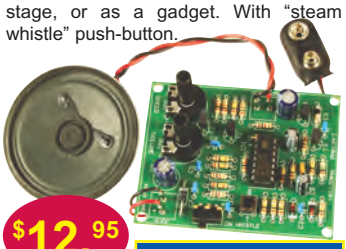
Check cables for continuity and identify individual wire. Ideal for speaker cable polarity checking. LED indication for open circuit, shorts and correct or wrong polarity. Pushbutton operation with auto power-off.

$9.95

Requires one (1) "9V" battery.

Steam Engine Sound Generator w/ Whistle
MK134

Generates sound of a vintage steam engine. Adjustable "speed" and volume. Great for model railroads, radio plays, stage, or as a gadget. With "steam whistle" push-button.

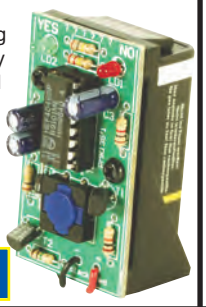


$12.95

Requires one (1) "9V" battery.

Electronic Decision Maker
MK135

Helps making difficult YES or NO decisions. Ideal for the indecisive. Simply push the button to start flashing of YES/NO LEDs. Flashing speed gradually decreases and finally one LED remains lit.



$6.95

Requires one (1) "9V" battery.

Super Ear Amplifier
MK136

Stereo audio amplifier boosts sound 50 times. Great for the hearing impaired (e.g. when watching TV), as a gadget, science project, etc. With volume control and on/off switch.

Requires three (3) "AA" batteries & stereo headset.

$12.95

IR Remote Checker
MK137

The easy way to check your IR remote for proper operation. Simple operation : point the remote at the sensor and push any button. 4 flashing LEDs indicate remote operation.

$6.95

Requires one (1) "9V" battery.

Clap On/Off Switch
MK139

Operate your lighting with a simple handclap. Ideal for disabled or elderly people.

$19.95

SMD Happy Face
MK141

Ideal introduction into SMD (Surface Mounted Device) Technology. Miniature-size gadget, 2 LEDs flash alternately, great as attention grabber.

$11.95

Requires one (1) "3V" Li button cell.

Halloween Pumpkin
MK145

25-LED bright-colored pumpkin-shape Halloween gadget. Random flash effect simulates flickering candle. One (1) extra high intensity yellow LED illuminates the pumpkin; on/off switch.

$13.95

Requires one (1) "9V" battery.

We can special order products from www.vellemanusa.com not shown here for you! Just call or e-mail for a quote.

Dual White LED Stroboscope MK147

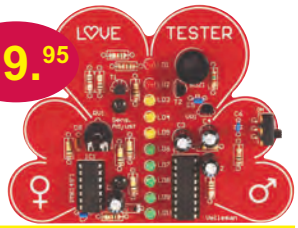
Two super bright white LEDs, powerful flash effect, great for parties, in scale models, to observer moving parts, slow/fast selector, and speed adjust trimmer, speed adjustable between approx. 1 to 60 flashes per second.

$11.95

Requires one (1) "9V" battery.

Love Tester MK149

Check your love life! Each partner holds one end of the PCB, then they join hands, and watch the meter go! 10-LED readout plus audible "love-level" indication. Flashing LEDs indicate you're a red-hot lover.



$19.95

Requires one (1) "9V" battery.

Digital LED Clock MK151

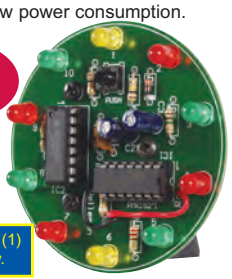
Clock with red 7-segment displays in attractive enclosure. Automatic time base selection (internal or net-frequency controlled 50/60Hz). Internal time base with fine-tuning adjustment. 12 or 24 hour mode for the time display. Runs on 9V supply (not included).

$34.95

Requires three (3) "AA" batteries for back-up.

Wheel of Fortune MK152

10-LED wheel of fortune. Push the button to start spinning action. Spinning speed gradually decreases, finally it stops and one LED remains lit. Auto power-off. Low power consumption.



$8.95

Requires one (1) "9V" battery.

Magic Message MK155

Amaze your friends: wave the wand to make the message appear. The message seems to be floating in the air! Lots of built-in messages and enter your own 7-character message. Applications: novelty gadget, in emergencies, at concerts or TV-shows, to welcome people, etc. Excellent visibility due to high intensity red LEDs. Low power consumption. Auto power-off.

$19.95

Requires two (2) "AAA" batteries.

Flickering Electronic Candle Kit MK167

Cannot be blown out by the wind! Safe for kids and pets. Great at home, for parties, Xmas, Halloween, etc.
Choose between 3 different modes: realistically flickering flame, steady flame, fade in - fade out.

$11.95

Requires one (1) CR2032 3V battery.

60 LED Multi-Effect Star MK170

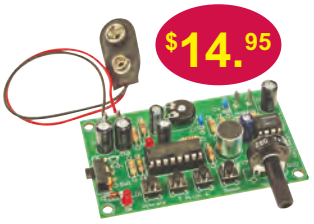
Processor-controlled LED star creates multiple dazzling effects. Extra LEDs included, allowing different color combinations: make your own mix of red and yellow LED's or make the star fully red or yellow. Sequencing is possible.

$34.95

Requires one (1) "9V" battery.

Voice Changer MK171

Make you voice sound like a robot. Add vibrato effect. "Pitch" buttons make your voice sound lower or higher. Built-in microphone and power amplifier with volume control, just add a speaker.

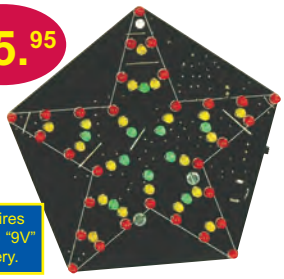


$14.95

Requires one (1) "9V" battery.

Sound Star MK172

60 LED star. Responds to sound and music in a "VU-meter" fashion. Built-in microphone, adjustable sensitivity.
Operates on 9-12VDC, 200mA.

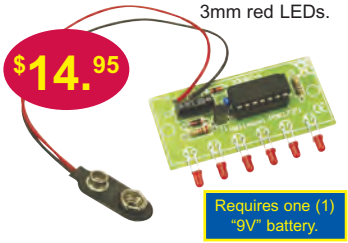


$25.95

Requires one (1) "9V" battery.

Mini 6-LED Chaser MK173

One LED scans from side to side or in one direction (selectable). Use as an attention grabber in stores, at exhibitions, etc. Applications: toys, scale and RC models, as gadget, for stage, plays, movies, etc. Six high-intensity 3mm red LEDs.



$14.95

Requires one (1) "9V" battery.

Voice Recording/ Playback Module MK195

Record time between 10 and 35 sec. (adjust the sample rate). Onboard microphone. Using the speed adjust a "funny voice" can be created.

$29.95

Requires one (1) "9V" battery.

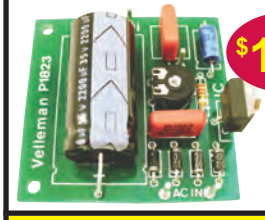
Universal Mono Pre-Amplifier K1803

This kit has been developed as a pre-module for a number of audio applications where there is an insufficient input signal.
Applications as a microphone pre-amplifier or for level correction.

$12.95

1A Power Supply K1823

This small power supply provides a regulated voltage, adjustable between 1.5 and 35V at 1A. With the LM317 regulator remarkably better ripple and regulation characteristics are given than with conventional regulators. Current limiter and thermal overload protection are included in the IC. Supplied without heatsink.



$15.95

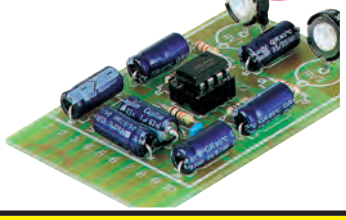
Universal Stereo Pre-Amplifier K2572

This kit has a frequency range of 40Hz to 30kHz (–dB), 40dB gain with 40dB maximum adjustable gain. It has a maximum input voltage of 50mVrms and an output impedance of 1kΩ.

$19.95

Universal Start/Stop Timer K2579

Miniature timer for all applications requiring a delay of up to 60 minutes. The control range may be adjusted.



$16.95

Police Siren K2604

Enter the world of amazing electronic sounds and noises. Create or imitate sirens of all kinds by adjusting 3 trimmers. Powerful sound with a 2W amplifier on the PCB.

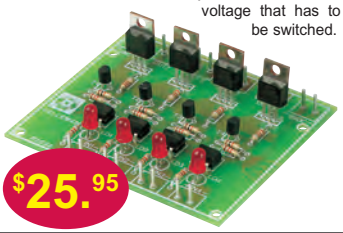
$17.95

More models and specifications on our website www.cs-sales.net.

Quad Triac Switch Card

K2634

Relays are usually used to switch AC voltages by means of an electronic control because of their simplicity. However, when switching occurs too frequently or too quickly the life time of the contact points is shortened considerably. This can be solved perfectly by replacing the relays with a triac. Using optocouplers, the entire interface network remains electrically isolated from the voltage that has to be switched.

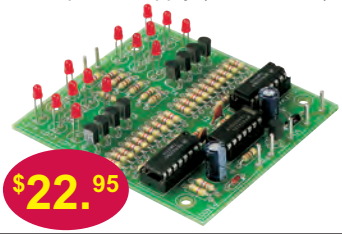


$25.95

Dual Electronic Dice

K3400

At your choice you can play with one or two dice. Displays are switched off automatically after 30 seconds to save battery power. Requires 8 to 12V DC or 6V AC / 60mA power supply (not included).



$22.95

7W Mono Audio Amplifier

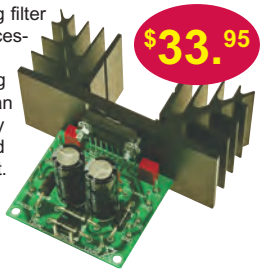
K4001

This small amplifier is constructed around the TDA2003 IC, capable of delivering 4Wrms at 4ohms. The IC is completely thermally and short-circuit protected. A conventional direct current can be connected as supply.

$18.95

2 x 30W Audio Power Amplifier K4003

This small amplifier is constructed with the TDA2616 IC, with a maximum supply of 2 x 15Wrms (4Ω) or 2 x 10Wrms (8Ω). The IC is thermally and short-circuit protected. Additional rectifier and smoothing filter are unnecessary, as alternating current can be directly connected to the unit.



$33.95

Guitar Headphone and Preamplifier

K4102

An electric guitar cannot be connected to just any amplifier or audio installation. This pre-amplifier has been designed for this purpose and provides you with a headphone output, allowing you to practice without disturbing others. Moreover, it is fitted with a special device for tone adjustment, allowing anyone to create their personal sound.

$39.95

Requires one (1) "9V" battery.

Pink Noise Generator

K4301

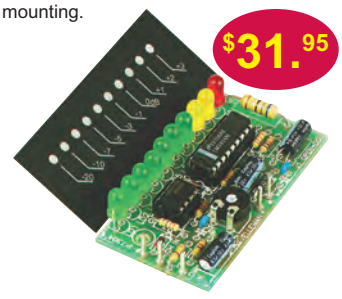
To analyze the acoustic properties of a room (usually a living room), a good pink noise generator together with a spectrum analyzer is indispensable. Moreover, a microphone with as linear a frequency characteristic as possible (from 20Hz to 20kHz) is needed. If you have an equalizer available, then the response can not only be checked but also corrected. Easily adapted to produce "white noise".

$22.95

Mono 10 LED VU Meter

K4304

VU meter with a scale consisting of 10 LEDs and an adjustable input. Dot or bar indicator. Supplied with 1 front panel suitable for horizontal or vertical mounting.

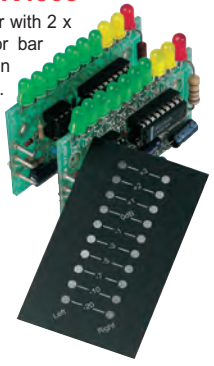


$31.95

Stereo VU Meter 2 x 10 LEDs

K4305

Stereo VU meter with 2 x 10 LEDs (dot or bar indicator) and an adjustable input. Included in package: One front panel suitable for horizontal or vertical mounting.

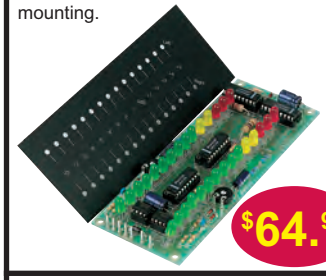


$36.95

Precision Stereo VU Meter 2 x 15 LEDs

K4306

Stereo VU meter with 2 x 15 LEDs (dot or bar indicator) and an adjustable input. Included in package: One front panel suitable for horizontal or vertical mounting.

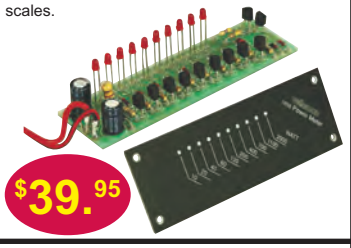


$64.95

Audio Power Meter

K4307

10 LED scale, up to 2000Wrms power measurements. Does not need a special power supply, because it is supplied directly from the speaker output. Ideal for car audio systems and PA systems. Also usable for bridged amplifiers. The unit can be used both horizontal and vertical. The kit comes with a front panel and four attractive front stickers, for the different scales.



$39.95

Light Computer

K5201

Sixteen different programs and seven outputs make this light computer a unique showpiece. This kit can find applications in party lighting, discotheques, advertisement lighting, signaling, etc. To be able to view the programs directly, each output is provided with a LED. The complete circuit can be installed so that all operations and LEDs are available from the front panel.

$69.95

Stroboscope

K5300

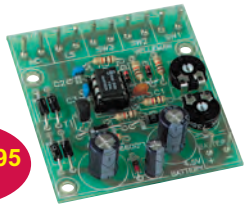
Flashing strobe light effects for discos. Make your own snapshots and "lightning" light effects. Flash frequency adjustable from 2 to 20Hz. 110V-120V AC.

$29.95

Multitone Chime

K6600

Electronic tones can be generated simply and cheaply using the device. This kit is primarily intended for use as a replacement for the traditional mechanical doorbell. Of course, it can also be used for many other types of applications.



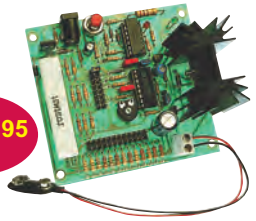
$29.95

Requires three (3) "AA" batteries.

Universal Charger

K7300

Many battery chargers are available on the market, but few of them are universal chargers. Using our kit, NiCd and NiMH batteries or different can be charged both quickly (52 minutes) and normally (14 hours). In order to ensure that the battery is fully discharged prior to charging and thus has a longer life cycle, an automatic discharger is also fitted.



$29.95

Symmetric 1A Power Supply

K8042

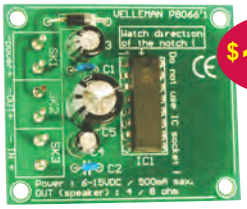
Low cost universal symmetric power supply - just add a suitable transformer and a heatsink. Ideal for e.g. op-amp applications, amplifiers, etc. Trimmers can be replaced by potentiometers to allow continuous adjustment of output voltage. LED output indicators. Compact size.

$19.95

3W Mono Amplifier

K8066

Small but powerful amplifier suits a wide range of applications such as : microphone amp, doorbells, melody generators, intercoms, sound effects, earphones, radio receivers, PC sound card, musical instruments, etc.



$15.95

We can special order products from www.vellemanusa.com not shown here for you! Just call or e-mail for a quote.

Ages 12 & up

ELENCO® RADIO KITS W/ TRAINING COURSES

(All require soldering assembly)

THESE RADIO KITS MAKE EXCELLENT PROJECTS FOR CLASSROOM STUDIES

The unique design of these kits allows you to place the parts over its corresponding symbol in the schematic drawing on the surface of the printed circuit board during assembly. This technique maximizes the learning process while keeping the chances for an assembly error at a minimum.

All kits include an assembly, lesson and theory of operation manual. The actual assembly is broken into simple sections. Each section should be completely tested before moving on. This reduces difficult troubleshooting associated with many similar kits. Each kit includes a practical hi-tech PC board with the schematic printed on the surface. The manuals are easy to understand and each radio kit PC board has been designed so that no cabinet is necessary. A special molded plastic base provides the necessary support to use the radio in any location, displaying the work achievement of the student.

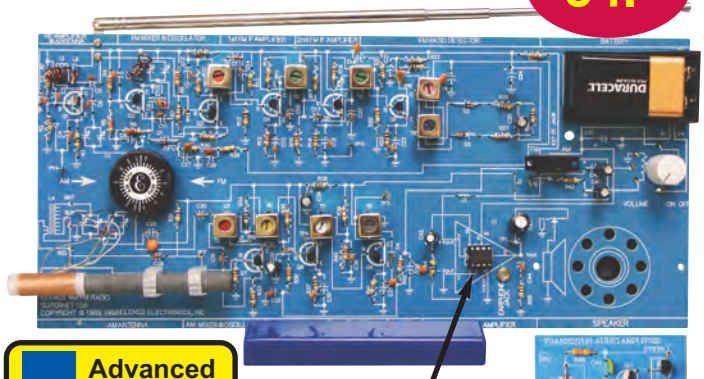
AM/FM Radio Kit and Training Course

Model AM/FM-108CK

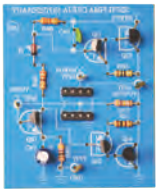
1 Integrated Circuit, 14 Transistors, and 5 Diodes

Training course of 56 pages is divided into 9 lessons; Audio Amplifier, AM Detector, AM IF, AM Amplifier, AM Mixer & Oscillator, FM Detector, 1st FM IF, 2nd FM IF, FM RF Stages. "Superheterodyne" designed to receive standard AM (amplitude modulation) and FM (frequency modulation) broadcast frequencies. New transistor module allows you to switch between the modern integrated circuit (IC) technology and the original transistor technology. Includes radio mounting stand.

$34.95



Advanced



PC Board Dimensions:
Main: 5 1/4" (H) x 11 5/8" (W)
Module: 2 3/8" (H) x 2" (W)

Requires one (1) 9V battery.

WEAR SAFETY GLASSES

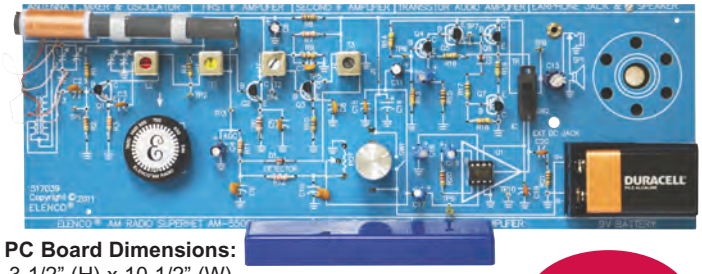
see page 65

AM Radio Kit and Training Course

Model AM-550CK

1 Integrated Circuit, 7 Transistors, and 2 Diodes

Training course divided into 5 lessons: Audio Amplifier, Detector, IF Amplifier, Oscillator, and Mixer - integrated circuit technology now included. "Superheterodyne" designed to receive standard AM (amplitude modulation) broadcast frequencies. Includes radio mounting stand.



PC Board Dimensions:
3 1/2" (H) x 10 1/2" (W)

$24.95

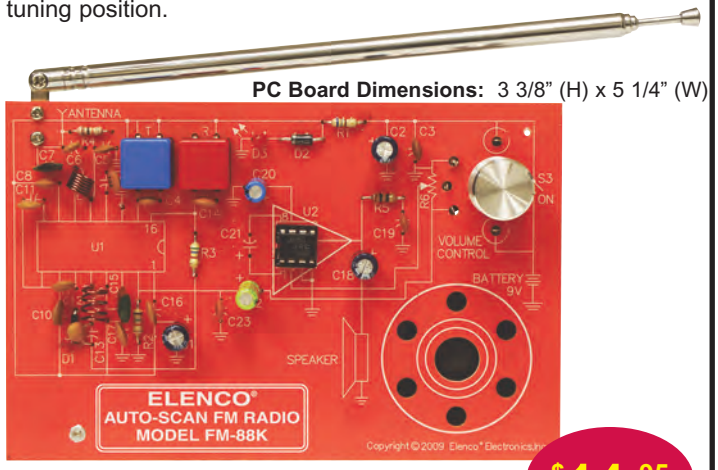
Requires one (1) 9V battery.

Intermediate

Two IC FM Radio Kit

Model FM-88K

The ELENCO® FM-88K Kit is a monophonic, two-IC, FM (frequency modulation) receiver designed to receive FM signals in the frequency range (88-108MHz). It uses electronic auto-scan to search for FM stations. This scan system is done with two button switches - one switch scans up, the other resets to the start of the tuning position.



PC Board Dimensions: 3 3/8" (H) x 5 1/4" (W)

Requires one (1) 9V battery.

Intermediate

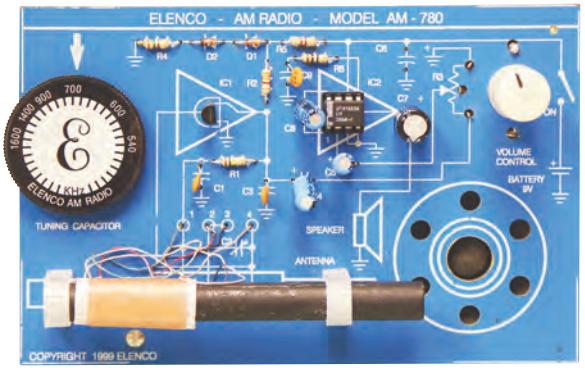
$14.95

Two IC AM Radio Kit

Model AM-780K

New Design - Easy-to-Build complete radio on a single PC board. Unique design allows you to place parts over its corresponding symbol on the PC board. Teaches the basic theory of AM radio operation.

Detailed instructions and illustrations make it an easy and educationally sound project.



PC Board Dimensions: 3 7/16" (H) x 5 5/16" (W)

Requires one (1) 9V battery.

Intermediate

$14.95

Ages 12 & up

ELENCO® POWER SUPPLY KITS Made in U.S.A.

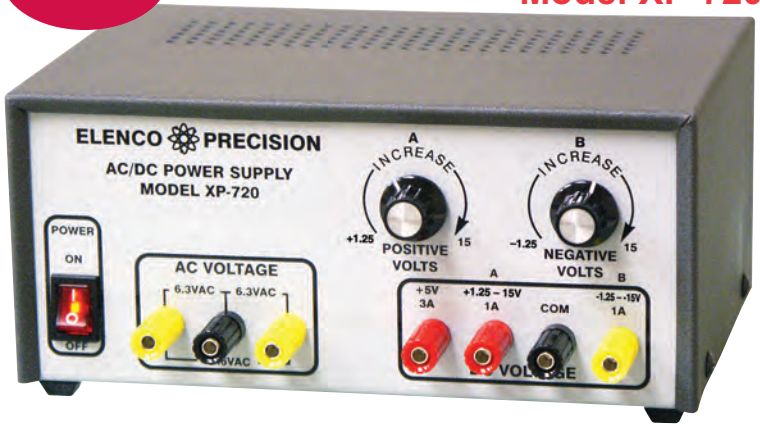
(All require soldering assembly)

Ideal as school projects for breadboarding, prototyping, and training. The regulated supplies are protected against damage from short circuits. **Download the manuals from our website www.cs-sales.net.**

Power Supply Kit

$79.95

Model XP-720K with Training Course



Model **XP-720K** has 3 fully regulated DC supply outputs, two outputs are continuously variable and one is fixed, plus a 12.6VAC output center-tapped to 6.3VAC.

Specifications

Input Voltage	120VAC
Output Voltage	1) 1.25VDC - 15VDC @ 1A 2) –1.25VDC - –15VDC @ 1A 3) 5VDC @ 3A 4) 6.3VAC @ 1A & 12.6VAC center-tapped @ 1A It features short circuit protection on all supplies.

Note: Variable outputs can be stacked to get 3 - 30VDC @ 1A.

Available Assembled Model XP-720 $99.95 - See page 60.

Variable Voltage Power Supply Kit

Model XP-15K with Training Course

A handy portable power supply with a variable output voltage of 15VDC. Mounted in a ventilated plastic case.

Specifications

Input Voltage:	120VAC
Output Voltage:	0 - 15VDC
Output Current:	0.5A @ 8V; 0.3A @ 12V; 0.2A @ 15V
Short Protected IC Thermo	

$24.95

Variable Voltage Power Supply Kit

Model K-11 with Training Course

A low cost way to supply voltage to school projects. For breadboarding, prototyping, and training.

$19.95

Ideal for School Projects!

Specifications

Input voltage:	120VAC
Output voltage:	0 - 15VDC @ 250mA AC: 8.5V @ 500mA

Ages 12 & up

ELENCO® DELUXE EDUCATIONAL KITS

(All require soldering assembly)

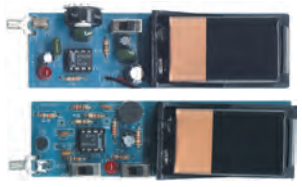
Fiber Optics Voice & Data

with Training Course

FO-30K

$19.95

Learn the basics of fiber optics communications while you build this exciting kit. Transmit your voice or a 1kHz signal through the fiber optic cable to a fiber optic receiver. Comes complete with all of the necessary components, including PC boards, microphone, speaker and fiber optic cable. Transmitter and receiver are on separate boards, Includes 3 ft. of fiber optic cable.



Requires one (1) 9V battery.

Digital Roulette

with Training Course

Model AK-300

$19.95

The Digital Roulette will be a sure winner with you, your friends and your relatives. Thirty-eight LEDs are arranged in a five inch diameter circle.

Requires one (1) "9V" battery.

Motion Detector Kit

with Training Course

Model AK-510

$19.95

Learn the basics of motion detector technology while building this motion detector kit that uses an infrared sensor. Use as a burglar alarm, message minder, room detector, or entry to home or business.

Requires one (1) 9V battery.

Ages 12 & up

ELENCO® MULTIMETER KITS

(All require soldering assembly)

If you are using or planning to use a digital or analog meter in your training programs, consider one of the meter kits below - easy construction, detailed assembly manuals. **Download the manuals from our website www.cs-sales.net.**

Deluxe Full Function Digital Multimeter Kit

with Training Course Model M-2666K

Features

- Extra large 1", 3 1/2 digit display
- Transistor tester
- Overload protection
- Capacitance to 200µF
- Diode test
- Audio continuity
- AC/DC current to 20A
- Low battery indication
- Rubber holster
- Tilt stand
- Safety input sockets & test leads.

$39.95

Advanced

Specifications

AC + DC Volts Accuracy	200mV, 2V, 20V, 200V, 1,000VDC, 750VAC DC: ±(0.5% rdg + 2dgt), 1,000V: ±(0.8% rdg + 2dgt) AC: 200mV, 750V: ±(1.5% rdg + 2dgt), 2V-200V: ±(1.0% rdg + 2dgt) Resolution 100µV
AC + DC Current Accuracy	200µA, 2mA, 20mA, 200mA, 20A DC: 200µA-20mA: ±(1.5% rdg + 2 dgt), 200mA: ±(2.0% rdg + 2 dgt), 20A: ±(2.5% rdg + 3 dgt) AC: 200µA-20mA: ±(1.0% rdg + 3 dgt), 200mA: ±(1.5% rdg + 3 dgt), 20A: ±(2.0% rdg + 3 dgt) Resolution 0.1µA
Resistance Accuracy	200Ω, 2kΩ, 20kΩ, 200kΩ, 2MΩ, 20MΩ 200Ω: ±(1.0% rdg + 2 dgt), 2kΩ - 2MΩ: ±(0.8% rdg + 3 dgt), 20MΩ: ±(2.0% rdg + 4 dgt) Resolution 0.1Ω
Capacitance Accuracy	2nF, 20nF, 200nF, 2µF, 20µF, 200µF 2nF - 20µF: ±(2.5% rdg + 3 dgt), 200µF: ±(5.0% rdg + 3 dgt), Resolution 1pF
Dimensions Accessories	7 1/2" (H) x 3 1/2" (W) x 1 13/32" (D) Test leads, Manual, 9V Battery included

20K/V VOM Model M-1250K

$27.95

Features

- 20,000Ω/V
- 23 ranges
- 3 1/2" meter
- Mirrored scale
- Audible continuity
- Checks transistors / diodes
- Safety input sockets and test leads
- 10A DC current
- dB scale
- Battery test
- Tilt stand

DSR-85
Dial Scale Reading Kit Included

Intermediate

Available assembled as Model M-1250 $25.95

Specifications

DC Volts	0.1, 0.5, 2.5, 10, 50, 250 – ±3% FSR / 1k – ±5% FSR
AC Volts	10, 50, 250 – ±4% FSR / 1kV – ±5% FSR
DC Current	50µA, 2.5mA, 25mA, 250mA – ±3% FSR / 10A ±5% FSR
Resistance	x1, x10, x100, x1k, x10k – ±3% of ARC
Transistor h_{FE} 0-1000	ICEO 15mA, 150mA
Dimensions Accessories	5 7/8" (H) x 3 23/32" (W) x 1 1/4" (D) Test leads, Manual, 9V and (2) 1.5V "AA" batteries

Digital Multimeter Kit Model M-1008K

with Training Course

$22.95

Features

- Audible continuity
- 3 1/2 digit LCD
- 19 ranges
- Transistor test
- Diode test
- Overload protection
- Pocket-size

Intermediate

Available assembled as Model M-1000E $12.95

Specifications

DC Volts AC Volts Accuracy Input Impedance	200mV, 2V, 20V, 200V, 600V 200V, 600V DC ±1/2%, AC ±2% Resolution 0.1mV 1MΩ
DC Current Accuracy	200µA, 2mA, 20mA, 200mA, 10A 200µA - 20mA: ±1.8% rdg + 2 digits; 200mA: ±2.5% rdg + 2 digits; 10A: ±3.0% rdg + 2 digits Resolution 0.1µA
Resistance Accuracy	200Ω, 2kΩ, 20kΩ, 200kΩ, 2MΩ ±1% rdg + 2 digits Resolution 0.1Ω
Dimensions Accessories	5" (H) x 2 7/8" (W) x 1" (D) Test leads, Manual, 9V battery

ELENCO® TEST EQUIPMENT KITS

(All kits on this page require soldering assembly)

Function Generator Kit

Model FG-500K

with Training Course

$39.95

Provides sine, square or triangle waveforms continuously variable 1Hz to 1MHz. Amplitude adjustable to 3V peak-to-peak. Complete with all parts, PC board, schematic, deluxe case and extensive assembly manual.

Requires one (1) 9V battery.

Specifications

Output

Waveforms: Sine, square, triangle
Frequency: 1Hz - 1MHz
Impedance: 600Ω ±10%
Amplitude: Sine/triangle: 0-3V
Squarewave: 8V
Frequency variable range: 10:1 or more
Frequency multiplier: Six decade steps

Sine Wave

Distortion: Less than 1% (at 1kHz)
Flatness: ±0.05dB (1Hz - 100kHz)

Square Wave

Symmetry: Less than 5% (at 1kHz)
Rise / fall time: Less than 50/30ns (at 1kHz)

Triangle Wave

Linearity: Less than 1% (up to 100kHz)
Power requirements: 9V battery

Available Assembled: Model FG-500 $54.95 - pg. 57

Learn Surface Mounting Techniques Function Generator Kit

Model FG-600K **with Training Course**

$44.95

This versatile function generator includes surface mount components such as ICs, resistors and capacitors. When completed, it provides Sine, Square and Triangle waveforms, continuously variable to 1MHz. Amplitude adjustable. Complete with all parts and PC board. Includes case and extensive training manual.

Requires one (1) 9V battery.

Intermediate

Diode/Transistor Tester Kit

Model DT-100K

$24.95

This dynamic tester allows the checking of transistors and diodes in circuit. Identifies NPN or PNP transistors. Checks all types - small or large power. Identifies anode or cathode of diodes.

Requires one (1) 9V battery.

Available Assembled Model DT-100 $39.95 - pg. 57

Multi-Network Cable Tester Kit

Model TCT-255K

This tester is a convenient instrument for testing different unshielded wiring schemed telephone cables with RJ-11 and RJ-45 connectors and coax cables (F and BNC connectors). Cables can be tested before and after they are installed.

$39.95

Features

- Testing cables before or after their installation
- Mapping function
- Cable identification (straight or cross-pinned)
- Open or short testing
- F to BNC connectors included
- Low battery indicator
- Auto power-off function (30 seconds)
- 9V battery included

(Assembly required)

Resistor Substitution Box Kit

Model K-37

$17.95

Contains 24 different value resistors from 10Ω to 1MΩ. 5%toerance, 1/2 watt.

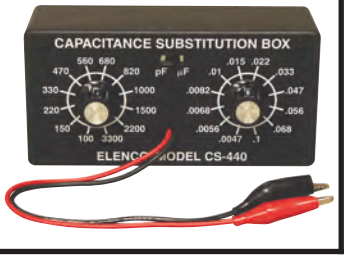
Available Assembled Model RS-400 $27.95

Capacitor Substitution Box Kit

Model K-38

$17.95

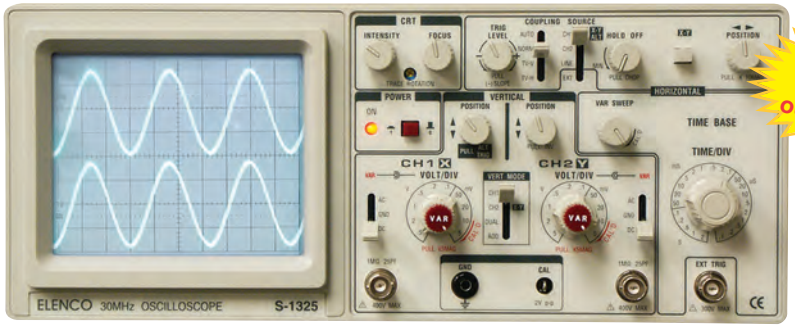
Contains 24 different value capacitors from 100pF to 0.1μF; 50 or 100 volt.



Available Assembled Model CS-440 $27.95

ELENCO® DUAL TRACE 30MHz ANALOG OSCILLOSCOPE

Model S-1325



See more models on our website.

$495

Features

- Dual or single trace operation.
- Calibrated 23 step timebase with x10 magnifier.
- 1mV/DIV sensitivity
- AUTO/NORM triggered sweep operation with AC, TV-H, TV-V and line coupling.
- Front face dust cover included.
- 2 FREE probes (x1 & x10) included.

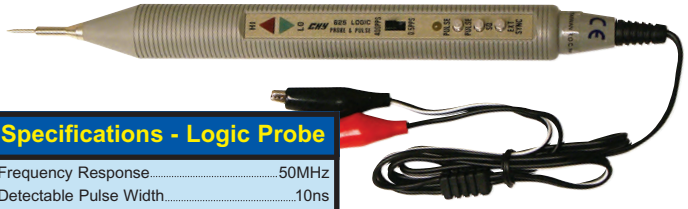
DIGITAL LOGIC AND PULSER PROBES

(Kits require soldering)

Elenco® Logic Probe & Pulser Combo

Model LP-900

A unique two-in-one logic probe & pulser that simplifies troubleshooting and analyzing digital circuits.



$31.95

Specifications - Logic Probe

Frequency Response	50MHz
Detectable Pulse Width	10ns
Logic Threshold	TTL Hi 3V, Lo 0.75V CMOS Hi 60% Vcc, Lo 15% Vcc
Input Impedance	120kΩ
Operating Supply Voltage	4-18V
Max. Input Protection	±70VAC/DC @ 15 s.
Power Supply Protection	±20V

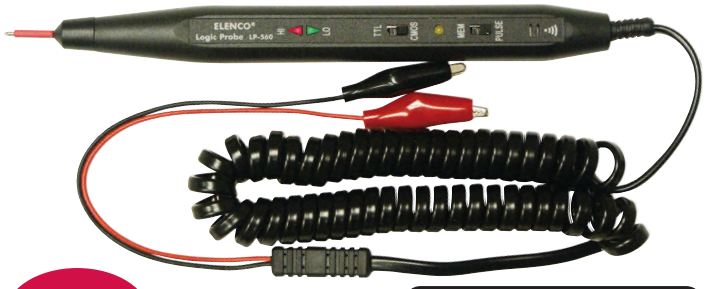
Specifications - Logic Pulser

Pulse Repetition Rate	0.5/400Hz
Pulse Width	10µs
Output Current:	
Pulser Mode @ 0.5Hz	100mA sink/source
Square Wave Mode @ 500Hz	5mA sink/source
Sync Input Impedance	1MΩ
Operating Supply Voltage	5-15V
Max. Sync Input Protection	±120VDC @ 30 s.
Output Protection	±35VDC @ 30 s.
Power Supply Protection	±20VDC @ 30 s.

Elenco® Logic Probe

Model LP-560

The LP-560 Logic Probe provides convenient and precise use in the measurement of logic circuits. It displays logic levels (high or low), pulses and voltage transients down to 25 nanoseconds. High intensity LED readouts provide instant response to the logic state.



$19.95

Specifications

Working voltage	4-18VDC
Frequency response	20MHz
Minimum detectable pulse width	25ns
Input impedance	1MΩ
Input overload protection	±220VAC/DC 15s
Supply voltage protection	±20VDC
Pulse indicator flash time	500ms
Operating temperature	32° - 122°F (0° - 50°C)

Features

- Tests all logic families (TTL, LSI, CMOS, ECT)
- Captures pulses to 25ns (20MHz)
- Audio beeper, two sounds HI and LOW
- Memory function
- Colored LED's for different functions
- Input overload protection
- Logic probe is circuit powered
- Reverse polarity protection

Velleman® Signal Tracer/Injector Kit

Model K7000

Ages 12 & up

Injector:
- 0-2.5Vrms output (adjustable)
- Output impedance: 1.5kΩ
- Frequency: ± 1kHz

Tracer:
- 3.5mV to 10Vrms sensitivity (adjustable)
- Gain: 40dB
- Input impedance: 50kΩ

$27.95

This signal tracer/injector has been designed to inject or detect a specific signal into an audio circuit in need of repair (such as amplifiers, radios, tone controls, ...) so as to detect the fault. In this way problems can be traced more easily. The signal tracer may also be used as a simple monitor or amplifier. Requires soldering.

Elenco® Logic Probe Kit

Model LP-525K

$15.95

Digital Logic Probe in kit form provides convenient and precise use in measurement of logic circuits. It displays logic levels (high or low), pulses and voltage transients down to 25 nanoseconds and a maximum input of 20MHz. Large PC board and detailed manual for easy construction. Requires soldering.

Ages 12 & up

Elenco® Logic Pulser Kit

Model LP-425K

$15.95

The Logic Pulser Kit is a desirable device in the troubleshooting of logic circuits and complements the logic probe in pulse tracing signals in complex circuits. It injects a signal directly into a circuit without having to disconnect components. It is circuit powered and has a switchable output of 0.5 or 400Hz at 100mA. Designed for easy construction. Requires soldering.

Ages 12 & up

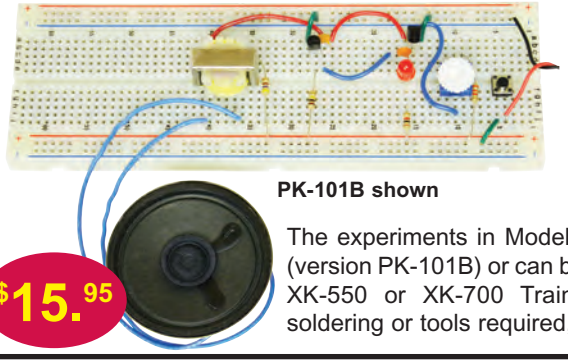
ELENCO® TRAINING COURSES AND PROTOTYPING

Basic Electronic Experiments — Model PK-101

Transforms any Standard Breadboard into an Electronic Learning Center!

72 page manual and parts included teach you:

- The basic principles of electronics.
- How to build circuits using a breadboard.
- How all of the basic electronic components work and how to read their values.
- How to read electronic schematics.
- How to design and troubleshoot basic electronic circuits.
- How to change the performance of electronic circuits by changing component values within the circuit.



PK-101B shown

$15.95

Get the 9830 board (page 54) and a 9V battery included in PK-101B. **Save $3!** $21.95

The experiments in Model PK-101 require a breadboard (version PK-101B) or can be done on the Elenco® XK-150, XK-550 or XK-700 Trainers (see pages 54-55). No soldering or tools required, over 20 parts included.

Perform 50 Experiments

- Electronic Keyboard
- Water Alarm
- Finger Touch Lamp
- Electronic Kazoo
- Battery Tester
- Magnetic Bridge
- Voltmeter
- Morse Code

*** And a Lot More! ***

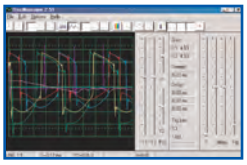
Requires one (1) 9V battery.

Basic Electronics with Computer Interface — Model PK-201

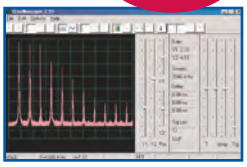
$39.95

Same as the PK-101, with the addition of computer software and cable interface for 1/8" microphone jack (breadboard not included).

Computer interface turns your PC into an oscilloscope and spectrum analyzer. See visually how oscillators and amplifiers work. Analyze your own voice on the monitor (see breadboards pages 54 and 56).



Sample Screen in Oscilloscope Mode.



Sample Screen in Spectrum Analyzer Mode.

Before You Learn Electronics, Learn About Electronic Components! — Model ECK-10

28 page manual with dozens of illustrations includes detailed descriptions of all parts, their functions in a circuit, color codes, and five self tests.

Resistors | Capacitors | Inductors | Semiconductors | Others

Over 50 Parts Come with the Course!

$11.95

Elenco® Micro-Master® Computer Interface Trainer

A Basic Computer Training Kit to Learn the Fundamentals of Computers

Model MM-8000K

$159

Starting from scratch, **you build a complete computer system**. Our Micro-Master® Trainer teaches you to write into RAMs, ROMs, and run an 8085 microprocessor. You will write the initial instructions in permanent memory in a 2816E²PROM. Teaches all about input and output ports and computer timers. Complete with 128 page lesson manual, instructions, and experiments (soldering assembly required). Case dimensions: 8" (H) x 10" (W) x 3" (D).

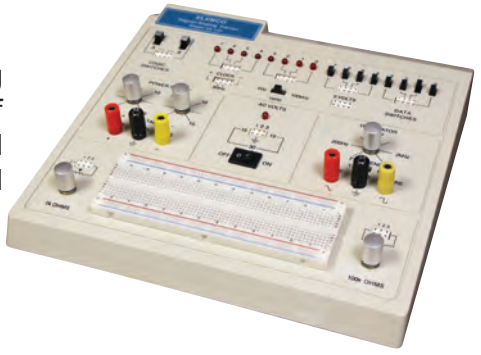
Specifications	
Digital Section	**Power Supplies**
• Eight data switches. • Two no bounce logic switches. • Eight LED readouts, buffered. • Clock frequency 1Hz, 1kHz, 100kHz, 60Hz. • Clock amplitude 5Vpp square wave.	• Variable power supply. • +1.25V to 15VDC @ 0.25A. • –1.25V to –15VDC @ 0.25A. • +5VDC @ 0.25A. • +30VAC center-tapped to 15VAC @ 0.25A.
Analog Section	**Case**
• Function generator - Sine, square wave. • Frequency adjustable in two ranges from 200 - 40kHz. • Amplitude Sine 4Vpp. • Square 12Vpp.	High impact molded case 2" (H) x 11" (W) x 11" (D). With flow-thru cooling to ventilate the power supply.
Potentiometers	**Breadboards**
• 2 undedicated potentiometers 1kΩ and 100kΩ.	• 1 breadboard, 830 tie points including two bus strips.

Elenco® Digital / Analog Trainer

Model XK-150

A low cost, full-function digital/analog trainer that meets the needs of electronic training programs. Rugged construction, can be used as fixed lab equipment or be portable.

$139



ELENCO® XK-700 DELUXE DIGITAL / ANALOG TRAINER

DELUXE COMPLETE MINI-LAB FOR BUILDING, TESTING AND PROTOTYPING ANALOG AND DIGITAL CIRCUITS

Elenco's advanced designed Digital/Analog Trainer is specially designed for school projects. It is built on a single PC board for maximum reliability. It includes 5 built-in power supplies, a function generator with continuously variable sine, triangular and square wave forms. All power supplies are regulated and protected against shorts. The trainer is mounted in a professional technician tool case made of reinforced metal with heavy-duty handles and locks. The removable, dual-sided tool pallet has many pockets and elastic retainers to hold a broad line of tools and devices. A special ramp in the case will hold the meter of your choice.

Tools in Case

Model **XK-700T** (shown in photo) is a stock trainer with tools and includes tools shown below **(meter, logic probe, & calculator shown are sold separately)**.

- **C-400** Deluxe case
- **ET-10** IC puller
- **SE-1** Solder ease kit
- **SH-1** Soldering iron holder
- **SP-4** Desoldering pump
- **SR-2B** Deluxe soldering iron
- **ST-1** Mini diagonal cutters
- **ST-2** Mini long nose pliers
- **LF-99** Lead-free solder tube
- **ST-20** Safety goggles
- **ST-30** Premium wire stripper
- **ST-75** 11 pc. screwdriver bit set
- **SW-3** Desoldering wick
- **TL-8** Precision screwdriver set

See below for detailed specifications.

- **Model XK-700 Trainer -** Available fully assembled without tools. **$229**
- **Model XK-700T Trainer -** Available with tools as shown - meter, calculator, and logic probe sold separately **(over $40 in tools only $20 more)**. **$249**
- **Model XK-700K Trainer -** Available as a kit without tools **(you build it and SAVE $40). Requires soldering.** **$189**
- **Model XK-700TK Trainer -** Available as a kit with tools as shown - meter, calculator, and logic probe sold separately **(over $40 in tools only $20 more). You build it and SAVE $40! Requires soldering.** **$209**

When ordering a meter to be used with the XK-700 Trainer, specify the PSV-50 Kit. It will provide you with the needed Velcro to hold the meter in place.

Dimensions: 13" (H) x 18" (W) x 6½" (D)

Add on PK-101 (see page 54) and get 52 experiments for your trainer!

XK-550 & XK-700 SPECIFICATIONS

Power Supplies

- Variable Power Supply
- 0V to 20VDC @ 0.5A (0V to 15VDC @ 1A)
- 0V to –20VDC @ 0.5A (0V to –15VDC @ 1A)
- +12VDC @ 1A
- –12VDC @ 1A
- +5VDC @ 1A
- +30VAC center-tapped to 15VAC @ 1A

Analog Section

- Function Generator - Sine, Triangular, Square Wave.
- Frequency adjustable in five ranges from 1 to 100kHz.
- Fine frequency adjust
- Amplitude adjust
- DC offset

Potentiometers

- 2 undedicated potentiometers 1kΩ & 100kΩ.

Digital Section

- Eight data switches.
- Two no bounce logic switches.
- Eight LED readouts, buffered.
- Clock amplitude 5Vpp square wave.

Breadboards

- 2 breadboards, each containing 830 tie points (total 1,660).

Fast Track Construction

Most of the components are on one PC board, eliminating all wires between the PC board, pots, regulators and switches. Makes assembly easier and faster, eliminates errors (K versions).

ELENCO® XK-550 DIGITAL / ANALOG TRAINER

Same trainer as XK-700, except in our molded organizer case. The tools shown with the trainer are the most commonly used in the educational field or you can make your own selection of tools and meter to go with the trainer.

Tools in Case

Model **XK-550T** (shown in photo) is a stock trainer with tools shown below **(meter shown is sold separately)**.

- **ET-10** IC puller
- **JW-140** Jumper wire kit
- **SP-4** Desoldering pump
- **ST-1** Mini diagonal cutters
- **ST-2** Mini long nose pliers
- **ST-3** Wire stripper
- **ST-5** Screwdriver slotted 3/16"
- **ST-6** Screwdriver #1 phillips
- Anti-static foam pad

see page 65

- **When ordering a meter to be used with the XK-550 Trainer, specify a PSV-50 kit which will provide you with velcro to hold the meter in place and an anti-static foam pad that fits below the meter for storage of ICs. This is supplied FREE with meter order.**
- **When ordering tools, specify a TM-30 tool mounting kit. When four or more tools are ordered, the tool mounting kit is supplied FREE!**

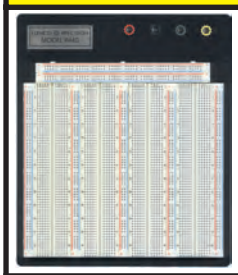
- **Model XK-550 Trainer -** Available fully assembled without tools. **$199**
- **Model XK-550T Trainer -** Available with tools as shown - meter sold separately. **$219**
- **Model XK-550K Trainer -** Available as a kit without tools **(you build it and SAVE $40). Requires soldering.** **$159**
- **Model XK-550TK Trainer -** Available as a kit with tools as shown - meter sold separately **(you build it and SAVE $40). Requires soldering.** **$179**

Dimensions: 12 1/4" (H) x 16 3/8" (W) x 5 1/4" (D)

ELENCO® BREADBOARD - PROTOTYPE DESIGN AIDS

A broad array of breadboards that provide unlimited freedom in laying out circuits and prototyping. Breadboards are arrayed from 830 tie points up to 3,220 tie points with colored binding posts that simplify identification of voltage points. Base material heavy aluminum, black anodized.

WK packages save you money!



Model 9440

Terminals: 3,220 tie points, 504 separate 5-point terminals, plus 14 horizontal bus lines.

Binding Posts: Four coded black, red, yellow, and green.

Dimensions: 8 1/4" wide • 9 1/2" long

$34.95

Model 9438

Terminals: 2,390 tie points, 378 separate 5-point terminals, plus 10 horizontal bus lines of 50 tie points each.

Binding Posts: Four coded black, red, yellow, and green.

Dimensions: 7" wide • 9" long

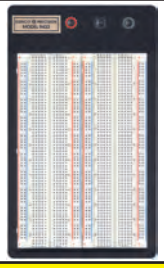
$29.95

Model 9480WK - 9440 breadboard with a JW-350 Jumper Wire Kit. **$43.95**

JW-350

Model 9488WK - 9438 breadboard with a JW-140 Jumper Wire Kit. **$34.95**

JW-140



Model 9433

Terminals: 1,660 tie points, 252 separate 5-point terminals, plus 8 horizontal bus lines of 50 common tie points each.

Binding Posts: Three coded black, red, and green.

Dimensions: 5 1/4" wide • 8 1/2" long

$19.95

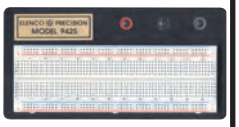
Model 9425

Terminals: 830 tie points, 126 separate 5-point terminals, plus 4 horizontal bus lines of 50 tie points each.

Binding Posts: Three coded black, red, and green.

Dimensions: 7 1/4" wide • 3 3/4" long

$12.95

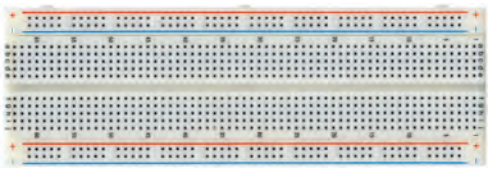


Model 9483WK - 9433 breadboard with a JW-70 Jumper Wire Kit. **$22.95**

JW-140

Model 9485WK - 9425 breadboard with a JW-70 Jumper Wire Kit. **$15.95**

JW-70



Model 9830

$7.95

Our top quality bredblox contains 830 tie points including four independent common bus lines for easy connections to common lines. Blox have interlocking features. **Dimensions:** 2 1/8" (H) x 6 1/2" (W).

Model 9880WK - 9830 breadboard with a JW-70 Jumper Wire Kit. **$10.95**

JW-70

Jumper Wire Kits for Breadboarding

Model JW-350

Contains 350 lengths of pre-stripped , pre-formed #22 solid wire in various colors. 14 different lengths of 25 pieces each. Contained in a large 14 compartment plastic case.

Dimensions: 5" (H) x 10 1/2" (W) x 1 1/4" (D)

$12.95

Hook-Up Wire on Spools

25ft.	#22 Gauge	Solid	Standded
Black	Part #:	884410	885210
Red	Part #:	884420	885220
Yellow	Part #:	884440	885240
Green	Part #:	884450	885250
White	Part #:	884490	885290
Brown	Part #:	884400	–
Orange	Part #:	884430	–
Blue	Part #:	884460	–
Purple	Part #:	884470	–
Gray	Part #:	884480	–

Solid Hook-up Wire Kits

Model WK106

Contains six (6) 25 ft. spools of #22 gauge solid wire – red, yellow, black, white, green, and blue in a dispenser box.

$15.95

Model WK103

Contains three (3) 25 ft. spools of #22 gauge solid wire – red, yellow, and black in a dispenser box.

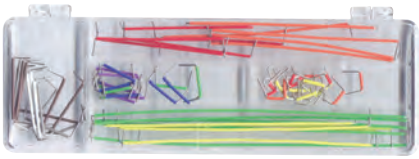
$8.95

Model JW-140

$6.95

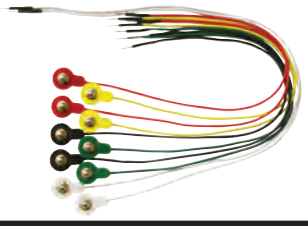
Contains 140 lengths of pre-stripped, pre-formed #22 solid wire in various colors. Contains 14 different lengths of 10 pieces each. Contained in a plastic case. **Dimensions:** 2" (H) x 6 1/2" (W) x 1/2" (D).

Model JW-70



$4.95

Contains 70 lengths of pre-stripped, pre-formed #22 solid wire in assorted colors and lengths. **Dimensions:** 2" (H) x 6 1/2" (W) x 1/2" (D).

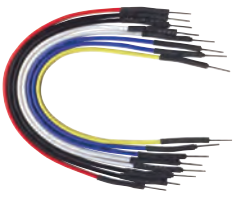


Model SCJW10

JW10 lets you connect Snap Circuits® to a breadboard. 10 wires with 10" length and unlimited possibilities!

See pages 2-10 for Snap Circuits®.

$9.95



Model JW-30

$14.95

Contains 30 pieces of reinforced, male to male jumpers - 10 pieces each of 2", 4", and 6". Assorted colors.

ELENCO® COMPONENT KITS *for the hobbyist*

NEW!

Basic Electronic Parts Kit
Model CK-1000

The Elenco® CK-1000 Basic Electronic Parts Kit includes a wide variety of basic electronic parts to satisfy almost any training project. Packaged in a handy plastic parts container with 18 compartments.

$79.95

Over 200 parts!

(listed on our website)

Color Code Calculator for resistors, capacitors, and inductors Model CC-100

Pocket-sized calculator is easy-to-use in determining values of resistors, capacitors, and inductors. Match colors and get a fast reading of values.

99¢

Carbon Film Resistor Kits

$17.95 each

5% tolerance in a cardboard organizer box.

Model RK-365

1/2 watt

365 pieces total

Model RK-370

1/4 watt

370 pieces total

Deluxe Carbon Film Resistor Kit
Model RK-485-DEL

Contains five (5) each of 73 standard values, from 1Ω to 1MΩ - 1/2 watt, 5% tolerance, carbon film - 485 pieces total. Packaged in a clear plastic case with 12 dividers.

Includes CC-100

$24.95

Resistor-Capacitor Combo Kit
Model RCK-465

$29.95

RK-365 + CAPK100

465 pieces total

Includes CC-100

Deluxe Resistor-Capacitor Combo Kit
Model RCK-635-DEL

RK-485-DEL + CAPK150-DEL

635 pieces total

Includes CC-100

$44.95

Capacitor Kit
Model CAPK100

$14.95

Contains ceramic disc, mylar, and electrolytic-type capacitors. 21 varieties, 100 pieces total - 30 ceramic from 10pF to 470pF, 35 mylar from 0.001µF to 0.220µF, and 35 electrolytic from 1µF to 1000µF. Packaged in a cardboard organizer box.

Deluxe Capacitor Kit
Model CAPK150-DEL

Contains ceramic disc, mylar, and electrolytic-type capacitors. 21 varieties, 150 pieces total - 60 ceramic from 2.2pF to 0.001µF, 50 mylar from 0.001µF to 0.47µF, and 40 electrolytic from 1µF to 1000µF. Packaged in a clear plastic case with 12 dividers.

$24.95

Diode Kit
Model DIOK80

$14.95

Contains an assortment of silicon, zener, germanium, bridge, and switching diodes. 80 pieces total, 20 types. Packaged in a cardboard organizer box.

Deluxe Diode Kit
Model DIOK100-DEL

Contains an assortment of silicon, zener, germanium, bridge, and switching diodes. 100 pieces total, 20 types. Packaged in a clear plastic case with 12 dividers.

$24.95

LED Assortment Kit
Model LEDK80

$14.95

Contains a variety of types and colors: Small, standard, large, rectangular, bi-color, blinking, ultra bright, red, amber, green, blue, yellow, and white. 80 pieces total, 18 varieties. Packaged in a cardboard organizer box.

Deluxe LED Assortment Kit
Model LEDK100-DEL

Contains a variety of types and colors: Small, standard, large, rectangular, bi-color, blinking, ultra bright, red, amber, green, blue, yellow, and white. 100 pieces total, 18 varieties. Packaged in a clear plastic case with 12 dividers.

$24.95

Diode / Transistor Tester
Model DT-100

Checks transistors and diodes in circuit. Identifies NPN or PNP transistors. Checks small or large power types.

You build it and SAVE! Available in kit DT-100K $24.95 pg. 52

$39.95

1% 1W Resistor Substitution Box
Model RS-500

Any value 1% resistors from 1Ω to 11.111MΩ increments.

(1 watt resistors)

$32.95

Resistor Substitution Box
Model RS-400

Contains 24 standard value resistors from 10Ω to 1MΩ, 5% 1/2W.

$27.95

You build it and SAVE! Available in kit K-37 $17.95 pg. 52

Capacitor Substitution Box
Model CS-440

Contains 24 different value capacitors from 100pF to 0.1µF, 50 or 100 volt.

$27.95

You build it and SAVE! Available in kit K-38 $17.95 pg. 52

ELENCO® DIGITAL MULTIMETERS

(See our website for complete specifications.)

Model LCM-1950

$89.95

Features

- Large 1" 3¾ digit LCD
- Autoranging frequency to 4MHz
- Capacitance to 400µF
- Inductance to 40H
- Resistance to 4,000MΩ
- Diode and transistor test
- Audible continuity test
- Logic test
- Holster included

Model M-1700

$49.95

Features

- 3½ digit, 2,000 count display
- Frequency to 15MHz
- Capacitance to 20µF
- Diode and transistor test
- Audible continuity
- AC/DC current to 10A
- 3-way overload protection
- Low cost
- Holster included

Model M-2625A

$44.95

Features

- 3¾ digit, 4,000 count display
- Frequency 10Hz to 10MHz
- Temperature to 1,292°F
- Rel. / reset mode
- Audible continuity / diode test
- Temperature probe included
- Capacitance to 4,000µF
- Auto power off
- Data hold
- Overload protection

Model CM-1555

$39.95

Features

- Measures capacitors from 0.1pF to 20,000µF
- 3½ digit LCD readout with unit indicator
- Zero control for test lead compensation
- Banana jack and special insertion jack included
- Compact size with tilt stand and holster

Model M-1750

$29.95

Features

- 3¾ digit, 4,000 count display
- Frequency to 10MHz
- Capacitance to 200µF
- Diode and transistor test
- Audible continuity
- AC/DC current to 10A
- 3-way overload protection
- Low cost
- Holster included

Model M-1450

$24.95

Features

- 7 Functions / 20 measuring ranges
- 0.5% Basic accuracy
- Overload protection
- Temperature °F and °C
- Back lit display
- Data hold
- Pocket-size
- Audible continuity test

ELENCO® CLAMP METERS

(See our website for complete specifications.)

Digital AC/DC Clamp Meter

Model ST-3030

$69.95

CE/LVD
CAT III 600V

Features

- 3¾ digit, 4,000 count display
- AC/DC clamp-on meter
- Auto/manual range
- Capacitance
- Diode check/continuity buzzer
- Relative measurement
- Temperature type K
- Frequency
- Data hold
- Back light
- Auto power off
- Zippered case included
- Test leads and battery included

This meter has been designed according to IEC-1010-2-032 concerning safety requirement for handheld current clamps for electrical measurement and test.

Digital AC Clamp Meter

Model ST-1012

$29.95

Features

- 3½ digit display
- AC current to 1,000A
- AC voltage to 750VAC
- DC voltage to 1,000VDC
- Temperature type K
- Resistance to 2MΩ
- Audible continuity
- Data hold
- Diode test
- Zippered case included
- Test leads and battery included

This meter has been designed according to IEC-1010-2-032 concerning safety requirement for handheld current clamps for electrical measurement and test.

AC Line Splitter

Model ST-74

This instrument is a special accessory for clamp meters which can be used to measure current conveniently without destroying the insulation part of the equipment power line. Splits two-conductor line cord for reading at outlets under load. Direct and 10x sensitivity. Up to 120 VAC at 15 amps.

$19.95

ELENCO® LOW COST MULTIMETERS

Compact Multimeter

Model M-1000E

$12.95

Features

- 3½ digit, 2,000 count display
- Diode & transistor test
- Audible continuity
- 3-way overload protection
- Relative measurement

Available as a kit (M-1008K) $22.95 - See page 51

20k/V VOM

Model M-1250

$25.95

Features

- 20,000Ω/V
- 23 ranges
- 3 1/2" meter
- Mirrored scale
- Audible continuity
- Checks transistors / diodes
- 10A DC current
- dB scale
- Battery test

Available as a kit (M-1250K) $27.95 - See page 51

Compact VOM

Model M-105

$9.95

Features

- 10,000Ω/V DC, AC
- Reads volts, amps, ohms
- 15 ranges
- Pocket size
- Battery test
- Fuse protected
- Safety test leads

2 Year Warranty

ELENCO® VARIABLE VOLTAGE POWER SUPPLIES

Dual Power Supply
Model XP-770

The Model **XP-770** has 3 outputs; 2 variable (0-20V @ 2A) and 1 fixed (5V @ 3A) with input voltages of 104-127VAC (60Hz) or 207-253VAC (50Hz). Current limited and short circuit protection.

Display accuracy:
Voltage +1% +2 digits
Current +2% +2 digits
Dimensions:
10¼" (W) x 6½ (H) x 14" (D)
Weight:
12.9lbs

$299

0-50V @ 3A Power Supply
Model XP-752A

The **XP-752A** has an output of 50VDC @ 3A. Its features include fine and coarse controls for voltage and current, and contains two three-digit digital display Volt/Current meters.
The supply incorporates an externally controlled current cutoff circuit with an LED indicating current overload. Protected against short circuits and overloads.
Input 120 or 240VAC.

$169

0-30V @ 5A Power Supply
Model XP-605

The **XP-605** has an output of 30VDC @ 5A. Its features include fine and coarse controls for voltage and current, and contains two analog Volt / Current meters.
The supply incorporates an externally controlled current cutoff circuit with an LED indicating current overload. Protected against short circuits and overloads.
Input 120 or 240VAC.

$159

AC/DC Variable Power Supply
Model XP-625

The Model **XP-625** is an ideal power supply for your school lab. It has a DC output from 0-30V at up to 5A, and an AC output of 0-40V at up to 5A and 0-110V at up to 2.5A. The voltage adjust knob controls all three outputs while the volt and amp meters display the desired setting.
Output is unregulated and unfiltered.

$149

4 Fully Regulated Power Supplies in One Unit
Model XP-581A

The **XP-581A** is our most popular power supply. It is ideally suited for laboratories, classrooms, and hobbyist use. It features 3 fixed DC voltages: +5V @ 3A, +12V @ 1A, –12V @ 1A and variable DC voltage: 0V - 20V @ 2A.
Housed in a rugged steel case, it is the perfect combination of versatility and high value.

$119

3 Fully Regulated Power Supplies 12.6VAC CT @ 1A
Model XP-720

The Model **XP-720** has 3 fully regulated supplies; 1.25-15V @ 1A, –1.25 to –15V @ 1A, or (3-30V @ 1A) and 5V @ 3A. It also has 6.3VAC @ 1A and 12.6VAC center-tapped @ 1A. It features short circuit protection on all supplies.

$109

Made in USA

You build it and SAVE! Available in kit XP-720K

$79.95

Deluxe Battery Eliminator
Model XP-100

This power supply is an ideal bench top battery eliminator. Substitutes a wide variety of batteries including AA, AAA, C, D, and 9V types. The voltage is conveniently selected by a rotary switch. Advanced, solid-state electronics provide both LINE and LOAD regulation of the output voltage. The voltage selector switch is precision-designed so that the output voltage does not increase during adjustment between voltage ranges.

Made in USA

$59.95

13.8VDC, 3A Regulated Power Supply
Model XR-38

The Model **XR-38** has a regulated output of 13.8 volts @ 3A and capable of handling 5A surges up to 30 minutes. The Model XR-38 is designed to power automotive equipment such as CB radios, stereo systems, mobile two-way radios, and vehicular alarm systems when removed from the vehicle.

$54.95

Model XR-38U - 110 or 220VAC input $59.95

Variable Voltage Power Supply
Model XP-15

NEW!

A handy portable power supply with a variable output voltage of up to 15VDC. Mounted in a ventilated plastic case.

$39.95

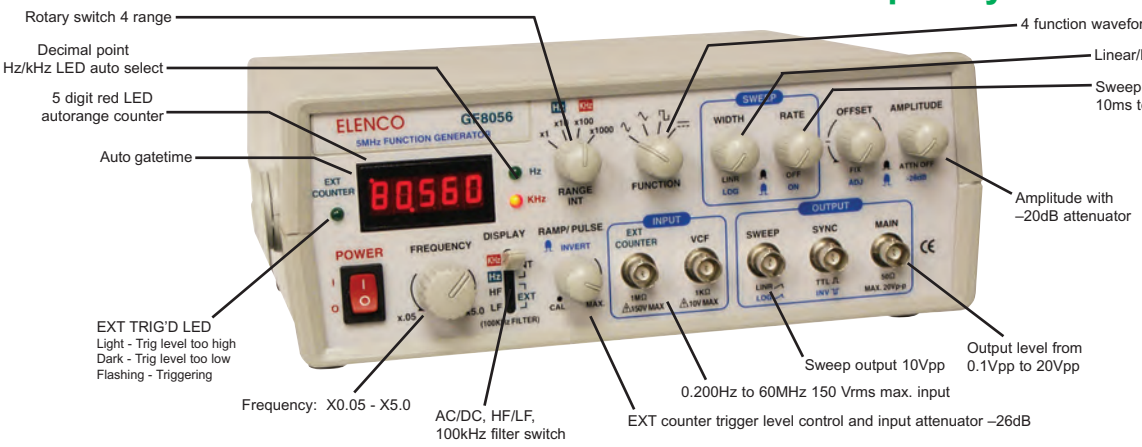
You build it and SAVE! Available in kit XP-15K

$24.95

ELENCO® AUDIO & FUNCTION GENERATORS

5MHz Sweep Function Generator

Model GF-8056 with Built-in 60MHz Frequency Counter



$329

Main Output	
Frequency range	0.5Hz to 5MHz in 8 ranges
Waveforms	4 waveforms (sine, square, triangle, DC)
Stability	0.1% for 15 minutes, 0.2% for 24 hours
DC offset	Continuously variable ±10V no load
Symmetry	50% (positive and negative half)
Linearity	<1% 1Hz-100kHz for triangle wave
Distortion	<1%, 1Hz to 100kHz
Rise / fall time	<90ns for square wave
Output impedance	50Ω <2% accuracy
Max. output	20Vpp no load, 10Vpp 50Ω load
Min. output	0.1Vpp no load, 0.05Vpp 50Ω load
Attenuator	X20: –26dB (±2% accuracy), X1: 0dB

Sync Output	
Output impedance	50Ω <2% accuracy
Output level	TTL level, >3Vpp fixed amplitude
Fanout	>20
Rise time	<60ns
VCF Input	
Input voltage	0-10V
Input frequency	DC-1kHz variance 1:1, 1:1,000
Sweep	
Output amplitude	10Vpp (no load) or 5Vpp (1kΩ load)
Output frequency	Continuous adjustment 0.2Hz - 100Hz
Sweep speed	10ms - 5s, continuously variable
Sweep width	1:1 - 1:100 continuously variable
Output waveform	Linear or log sweep ramp wave

Counter	
Display	5 digit 0.36" red LED display with autorange
Resolution	0.001Hz
Time base	20MHz
Accuracy	<0.002%
Max. input voltage	150Vrms
Input impedance	1MΩ <2%
Input frequency	0.2Hz - 60MHz
Attenuator	0dB, –26dB
Gate time	0.25s - 10s, auto-setting
Sensitivity	<30mVrms (1MHz)
General	
Power source	AC 115V / 230V +10%, 50/60Hz, 25W
Dimensions & Weight	10 13/16" (W) x 3 1/2" (H) x 11 13/16" (D) • 5 lbs. 8 oz.
Output Cable	BNC to alligator clips included.
Safety approvals	UL, CUL, GS, TUV, CE, IEC1010, EN61010

Audio Generator

Model SG-9100

$199

Specifications: SG-9100

Sine Wave	Square Wave
Frequency range: 10Hz - 1MHz (5 ranges)	**Output voltage:** ≥ 10Vpp
Frequency indicator: Dial scale	**Rise or fall time:** ≤ 0.25µs
Frequency accuracy: ±3% + 1Hz	**Symmetry:** 50% ±5% at 1kHz
Output voltage: ≥ 5Vrms (no load) ≥ 2.8Vrms (600Ω load)	**EXT SYNC**
Frequency response: 10Hz - 1MHz	**SYNC Range:** ±3% / Vrms
Distortion factor: 400Hz - 20kHz ≤ 0.1% 50Hz - 500kHz ≤ 0.5%	**Max. input voltage:** 10Vrms
Power: AC 115V ±15%, 50/60Hz	**Input Impedance:** 10kΩ ±10%
	Output
	Impedance: 600Ω ±10%
	Output attenuator: 0dB / –10dB / –20dB / –40dB / –50dB (6 ranges) (accuracy: ±1dB at 600Ω load)

Features

- Wide Frequency Range: 10Hz - 1MHz (5 Ranges)
- 6 Step output attenuator
- EXT SYNC Function
- Both Sine and Square Wave
- Easy Operation
- Includes BNC to red and black alligator clip cable similar to TL17

20Hz-150kHz Low Distortion Sine/Square Wave Audio Generator

Model GF-800/555

$69.95

Features

- Sine and square wave generator
- 20Hz to 150kHz in 46 steps
- Low distortion R-C oscillator
- Includes banana to clips cables
- Variable output control
- Low battery indicator
- Compact portable, lightweight

Specifications

Frequency range: x1 range 20Hz to 1.5kHz (23 steps), x100 range 2kHz to 150kHz (23 steps)
Accuracy: 20Hz through 100kHz (± 3% or less), 120kHz and 150kHz (± 5% or less)
Output control: 0dB/-20dB attenuator switch and variable amplitude control
Output impedance: approximately 600Ω

SINE WAVE CHARACTERISTICS
Output voltage: ≥1.2V rms at max. setting (no load)
Output flatness: (short term) 20Hz to 150kHz +0.5dB (reference frequency 1kHz)
Distortion: 200Hz - 15kHz < 0.05% 15kHz-150kHz < 0.3%

SQUARE WAVE CHARACTERISTICS
Output voltage: ≥ 5V p-p at maximum setting
Rise & fall time: Less than 0.5µs
Sag: Less than 5% at 20Hz (DC coupled)
Over shoot: < 2% from maximum output
Duty ratio: 50% ±5%

SYNCHRONIZATION CHARACTERISTICS
Output voltage: ≥1.2 rms (no load)
Output impedance: 1kΩ ±5%
Other specifications same as sine wave characteristics

1MHz Function Generator

Model FG-500

Specifications

OUTPUT:
Waveforms: Sine, square, triangle
Frequency: 1Hz - 1MHz
Impedance: 600Ω ±10%
Amplitude: Sine/triangle 0-3V Squarewave 8V (no load)
Frequency variable range: 10:1 or more
Frequency multiplier: 6 decade steps

SINE WAVE
Distortion: Less than 1%
Flatness: ±0.5 dB 1Hz-100kHz

SQUARE WAVE
Symmetry: Less than 5% (at 1kHz)
Rise & Fall time: Less than 300ns (at 1kHz)

TRIANGLE WAVE
Linearity: Less than 1% (up to 100kHz)
Power requirements: 9V battery

$54.95

Available in Kit FG-500K **$39.95**
You build it and save! pg. 52

ELENCO® / WELLER® SOLDER STATIONS

Variable Temperature Soldering Stations

LED readout for greater accuracy (**SL-30** only) • Temperature range 300°F to 900°F

This hi-tech soldering station incorporates a sophisticated electronic circuit that enables the user to change the tip temperature from 300°F (150°C) to 900°F (480°C). The temperature is maintained within ±10°F of its preset temperature. The tip is isolated from the AC line by a 24V transformer. The tip is grounded to eliminate static charges. 48W iron and tip 600020 included!

Model SL30A
Digital Display
for greater accuracy

Display is centigrade or fahrenheit

$84.95

Replacement Iron
(for both models)
Model 600010
$11.95

Model SL10A

$64.95

Replacement Tips: Only $3.95 ea.

Conical - 600020 (1/32")	Wedge - 600022 (3/32")
Conical - 600021 (1/64")	Screwdriver - 600023 (3/32")

Weller® 40W Soldering Iron Station Model WLC100

$49.95

- **Replacement Iron Model SPG40** **$19.95**
- **Replacement Sponge Model WCC104** **$1.95**

Features

- ON/OFF switch with "power-on" indicator light.
- Variable power control produces 5-40 watts.
- Quality lightweight pencil iron.
- Cushioned foam grip with replaceable heating element.
- Ideal for hobbyists, DIYers and students.
- Safety guard iron holder.
- Natural sponge tip cleaning pad.
- ST3 iron plated copper tip.
- 8 ST series tips available at www.cs-sales.net
- Complete with 40W iron SPG40.
- UL listed.

Model SL-5 Series Soldering Stations

The **SL5 Soldering Station** is electronically controlled to provide 5-40 watts and is ideal for professionals, students, and hobbyists. The unit includes a holder funnel for the iron, sponge pad for cleaning the tip and an on/off switch with indicator light.
It is available assembled or in kit form so you can build it.

with iron $34.95

Get the iron for only $5 more!

Only $3.95 ea.
Extra Tips (see page 63)

Includes SR-6 40W Iron!

without iron $29.95

ASSEMBLED SOLDERING STATIONS

Model SL540 - This station comes complete with a 40-watt soldering iron providing you with variable heat - 5 watts to 40 watts. For general soldering applications.

SOLDER STATION KITS (ASSEMBLY REQUIRED)

Model SL5K40 - A solder station in **kit form** using a 40-watt soldering iron that is included to build the station. The 40-watt soldering iron then becomes part of the station.

⬇ SOLDER STATIONS WITHOUT SOLDERING IRON ⬇

Model SL5 is the station that comes **WITHOUT** a soldering iron. You may plug in any iron and obtain variable heat. It is suggested that you use 40-watt or 60-watt irons.

Model SL5K is a solder station in **kit form**. The soldering iron is **NOT** included. You build the station with your own soldering iron (40-watt iron suggested). Ideal for student projects.

Variable Temperature Soldering Station Model SL-75

$21.95

LOW-COST solder station features manual temperature settings.

Included iron is hard-wired to unit and NOT replaceable

Extra Tips:
SL75T2 (wedge)
SR1NT (conical)
Only $1.95 ea.

6-Pack Soldering iron tips Model TIPK-2 available
(See page 63 for more details)

Features

- Conical and wedge tips included
- 48W heater power
- Temperature range 350°F - 900°F
- Electronic temperature control
- Power on LED
- Anti-static ground output

Deluxe Temperature Controlled Soldering Station with Ceramic Heater Model ZD-931

$99.95

Ideal for applications requiring temperature stability when working with sensitive components.

$14.95

Replacement Iron 600015

Extra Tips 600020-600023 (see above) Only $3.95 ea.

Features

- 48W ceramic heating element with temperature sensor
- Temperature range: 150°C-450°C (302°F-842°F)
- Temperature on LCD display is centigrade **ONLY**
- LCD display with digital temperature display

Quantity Discounts Available . . . CALL!

ELENCO® SOLDERING EQUIPMENT

Professional 25W Soldering Iron
Model SR-3B

$15.95

Three-wire Grounded Plug • Lightweight • Rubber sleeve • Ceramic element with long-life tip - **SR-2BT2**

Deluxe 40W Soldering Iron
Model SR-6

$12.95

Three-wire grounded plug • Screw-in tip • Rubber sleeve handle • Long-life plated tip - **SR-2BT2**

Deluxe 25W Soldering Iron
Model SR-2B

$12.95

Three-wire grounded plug • Screw-in tip • Rubber sleeve handle • Long-life plated tip - **SR-2BT2**

Replacement Tips for SR-3B, SR-6, & SR-2B

Soldering Iron Tips Buy a 6-Pack & save!
Model TIPK-1

$17.95

Individually $3.95 ea.

- 1/8" Wedge - **SR-2BT**
- 3/64" Conical - **SR-2BT2**
- 1/64" Conical - **SR-2BT3** fine

Desoldering Pump
Model SP-4

Deluxe, high-vacuum pump with anti-static tip

$5.95

Desoldering Wick
Model SW-3

$1.49

Solder removal braid removes solder from all types of connections. 5ft. roll in handy dispenser.

Helping Hands
with Magnifying Glass
Model HH-55

$5.95

For soldering or making fine adjustments. Adjustable arms can hold objects in any position.

Soldering Iron Holder
Model SH-1

Soldering iron holder with sponge.

$3.95

Compact Soldering Iron Holder
Model SH-3

$3.49

Solder Tool Kit
Model ST-12

Save with this package!

$14.95

Consists of:
- **SR-1** - Standard soldering iron
- **SP-4** - Desoldering pump
- **SW-3** - Desoldering wick
- **LF-99** - Lead-free solder

Beginner Solder Tool Kit
Model ST-123

Consists of:
- **SR-1** - Standard soldering iron w/ stand
- **ST-1** - Diagonal cutters
- **ST-2** - Long nose pliers
- **ST-3** - Wire stripper
- **620003** - Sponge

$14.95

Standard Soldering Iron
Model SR-1N

$5.95

25W Pencil soldering iron Stand included
Conical replacement tip SR-1NT - **$1.95**

Soldering Iron Tips Buy a 6-Pack & save!
Model TIPK-2

$9.95

3 Conical
2 Chisel
1 Flat

Fits SL-75 and SR-1N

Lead-Free Solder
Model SOLD500GLF

1 lb. **$44.95**

99.3% tin, 0.7% copper
0.032 dia.
rosin core

Model LF-99 - 5 ft. **$1.95**
(same as above)

Velleman® Deluxe Soldering Iron Stand
Model STAND60

$18.95

Solder not included.

Tip Tinner, Cleaner
Model TTC-1

$8.95

Prevents oxide build-up. Prolongs tip life and heat transfer.

Dry Tip Cleaner
Model SH-1025

$10.95

Golden curls, 3.54" diameter

Golden Curls Refill
Model 556006
$3.95

Deluxe Helping Hands
with Large Magnifying Glass
Model HH-60

$11.95

For soldering or making fine adjustments. Adjustable arms can hold objects in any position.

Solder Ease Kit
Model SE-1

$2.95

4 pc. Set:
Brush, scraper, probe, and ST-23 heatsink in pouch

Heatsink
Model ST-23

$1.49

Soldering Iron Stand
Model SH-2

Small stand with flip-up wire form

99¢

ELENCO® TOOLS FOR THE ELECTRONIC INDUSTRY

Quantity Discounts Available

WIRE STRIPPERS & CUTTERS

Wire Stripper
7-in-1 all-purpose wire stripper, cutter, pliers, and crimper. Cushion grip. Strips AWG 16-26. 6" long.

$6.95

ST-30

Wire Stripper
Knife-type blade cuts, strips AWG 12-24; cushion grip, return spring. Strips AWG 10-18. 6" long.

$6.95

ST-30Y

Wire Stripper
Adjustable wire stripper, return spring, cushion grip. 5" long.

$2.95

ST-3

Diagonal Cutters
Drop forged steel, cushion grip. 6" long.

$4.95

ST-26

Mini Diagonal Cutters
Drop forged steel, return spring, cushion grip. 4 1/2" long.

$2.95

ST-1

Electrician Knife
High quality, stainless steel, large curved hawk bill blade with shackle at end. Ideal for stripping insulated electrical wires.

$6.95

ST-156

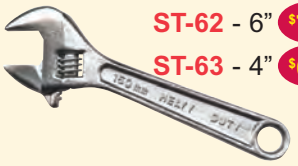
PLIERS

Adjustable Wrenches
Drop forged, chrome plated, max. jaw opening. Three sizes:

ST-59 - 8" $8.95

ST-62 - 6" $7.49

ST-63 - 4" $6.95

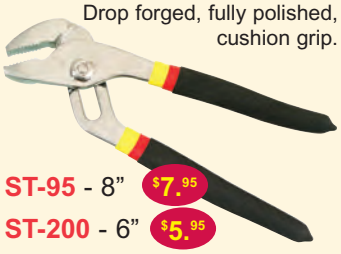


Linesman Pliers
Drop forged, fully polished, cushion grip. 8" long.

$6.95

ST-70

Locking Pliers
Drop forged, fully polished, cushion grip.



ST-95 - 8" $7.95

ST-200 - 6" $5.95

Long Nose Pliers
Drop forged steel, cushion grip. 6" long.

$4.95

ST-34

Slip Joint Pliers
Drop forged steel, chrome plated, cushion grip. 6 1/2" long.

$3.95

ST-8

Mini Long Nose Pliers
Drop forged steel, return spring, cushion grip. 5" long.

$2.95

ST-2

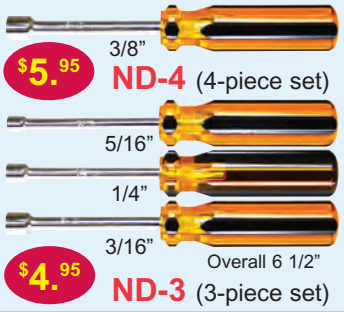
SCREWDRIVERS & NUT DRIVERS

Six Piece Precision Screwdriver Set
Swivel heads, packaged in storage case. 3 phillips and 3 slotted.

$2.95

TL-8

Nut Driver Sets
3 pc. set - 3/16", 1/4", and 5/16".
4 pc. set - 3/16", 1/4", 5/16", and 3/8".



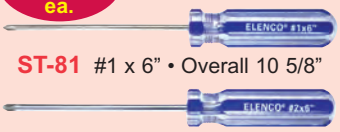
$5.95 ND-4 (4-piece set)

$4.95 ND-3 (3-piece set)

Phillips

Magnetic Screwdriver
Shock-proof, cellulose acetate plastic handle. Chrome vanadium blade.

$2.95 ea.

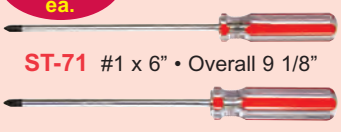


ST-81 #1 x 6" • Overall 10 5/8"

ST-81A #2 x 6" • Overall 10 5/8"

Magnetic Screwdriver
Shock-proof, cellulose acetate plastic handle. Chrome molybdenum blade.

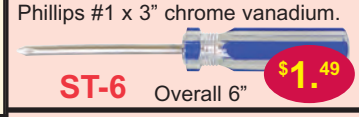
$2.95 ea.



ST-71 #1 x 6" • Overall 9 1/8"

ST-71A #2 x 6" • Overall 9 3/8"

Screwdriver
Phillips #1 x 3" chrome vanadium.



ST-6 Overall 6" $1.49

Screwdriver
Phillips #0 x 3".

$1.49

ST-101B Overall 5 1/4"

Pocket Screwdriver
Phillips #0 x 2" with clip.

$1.95

ST-11 Overall 4 1/4"

6-in-1 Driver Set
- 2 Phillips (#1 and #2)
- 2 Slotted (3/16" & 1/4")
- 2 Nut driver (5/16")

$4.95

ST-85

Slotted

Magnetic Screwdriver
Shock-proof, cellulose acetate plastic handle. Chrome vanadium blade.

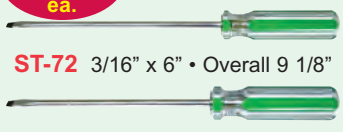
$2.95 ea.

ST-82 3/16" x 6" • Overall 10 5/8"

ST-82A 1/4" x 6" • Overall 10 5/8"

Magnetic Screwdriver
Shock-proof, cellulose acetate plastic handle. Chrome molybdenum blade.

$2.95 ea.



ST-72 3/16" x 6" • Overall 9 1/8"

ST-72A 1/4" x 6" • Overall 9 3/8"

Screwdriver
Slotted 3/16" x 3" chrome vanadium.

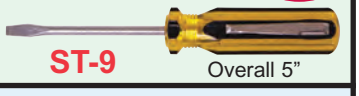
ST-5 Overall 6" $1.49

Screwdriver
Slotted 1/8" x 3".

$1.49

ST-101A Overall 5 1/4"

Pocket Screwdriver
Slotted 1/8" x 3" with clip.



$1.95

ST-9 Overall 5"

11 Piece Screwdriver Bit Socket Set

$4.95

- 3 nut drivers
- 2 phillips
- 2 slotted
- 3 star (torx)

ST-75

SPECIALTY TOOLS FOR THE ELECTRONIC INDUSTRY

Anti-Static Work Mat
Protects your work station from static discharge. Made of semiconductive vinyl. Includes grounding cord.
Size: 19" x 23"
$17.95
AS5 / WS3
AS4 / WS2 - Size: 11" x 22" $14.95

Anti-Static Wrist Strap
Protects ICs and other equipment from static discharges.
$4.95
WS-1Y / AS2
(velcro band)
WS-1 / AS3
(elastic band)

Safety Spectacles
Features wide upper frame. It can also fit over prescription glasses. (Safety approved).
$3.95
ST-22

Safety Goggles
Contours to head. Soft vinyl frame ventilated. (Safety approved).
ST-20
$2.95

Gooseneck Magnifier
Magnification: 3x
Arm length: 20.1"
(with mounting bracket)
Magnifier diameter: 3.54"
$12.95
VTMG5

PLCC Extractor
A spring-assisted extraction tool designed for the removal of PLCC's from sockets.
$2.95
VTPLCC / ST-96

IC Inserter
14/16-pin
$2.95
ET-14

IC Puller
$1.95
Stainless steel construction for removing IC's. Insulated vinyl grip.
ET-10

Head Magnifying Glass
2.2x and 3.3x.
$4.95
VTMG4

Magnifier (6x) w/ Tweezers
$3.95
2.4" Stainless steel tweezers
1.0" Ø glass
VTMG7

Folding Magnifier
Magnifier with pliable frame. Ideal for work on printed circuits.
$2.95
VTMG1

6pc. Plastic Tuning Needle Set
$5.95
VTPT

Hemostat
Straight 5" handle. Use as a clamp to hold parts in place.
ST-19
$4.95

Mini Table Vise
Metal jaws with a max. opening of 1 ½"
$5.95
VTTV3N

Lighted Magnifier
Requires two (2) "AA" batteries.
$4.95
ST-25

4 pc. Alignment Tool Set
$4.95
ST-13

Tweezers
6" straight. Insulated with blunt serrated ends.
ST-17
$2.95

Pick-up Tool
Telescopic, w/ magnetic tip and mirror. Extends to 18".
$4.95
VTPMT

9 LED Flashlight
Super Bright Flash Light. Requires three (3) "AAA" batteries.
$5.95
ST-325

Deluxe Alignment Tool
Metal non-magnetic tip.
$4.95
ST-41

Tweezers Crossover
With pointed tip. 4 1/2" long.
ST-16
$2.95

Magnetic Pick-up Tool
Telescopic pick-up tool with pocket clip. Extends to 24".
ST-45
$4.95

Pocket Flashlight
- 6" Inspection light
- Bright bulb
- Requires two (2) "AA" batteries.

$4.95
ST-32

Parts Retriever
3-prong. Pick up parts in hard-to-reach places.
$1.95
PR-3

Inspection Mirror
$3.95
All-angle, telescoping inspection mirror
ST-55

Steel Tape Rule 16.4'
graduation in cm and inches, lock button, steel, rubber housing magnetic lip
$4.95
VTRM5

Allen Wrench Set
8 pc. Inch sizes: 1/16", 5/64", 3/32", 1/8", 5/32", 3/16", 7/32" & 1/4".
$2.95
ST-15

USB Mini Vacuum Cleaner
Simply connect the vacuum to the USB port on your laptop or desktop computer. Two vacuum cleaning attachments included. No batteries required!
$9.95
MSV-1

Precision Duster
Pressurized blaster removes microscopic dust, lint, and other particles.
Net weight: 10 oz.
$12.95
ST-49

6" Ruler
Etched metal. Inch & metric divisions with pocket clip.
$2.95
ST-14

Resistor Lead Bending Gauge
For 1/4 & 1/2 watt resistors.
$4.95
ST-42

Quantity Discounts Available . . . CALL!

ELENCO® TOOLS & TESTERS

Hex-Type Crimping Tool
Model ST-60 — $24.95

For use on RG-58 and RG-59 connectors. Cushion grip. 9" long.

Multi-Function Wire Stripper
Model ST-302 — $14.95

Cuts, strips RG-58, RG-59, and RG-62. Precision strips 16 to 26 gauge wire.

Coaxial Cable Stripper
Model ST-35 — $15.95

Three-step coaxial cable stripper. Strips RG/U 6, 58, 59, 62 and 3C2V, 5C2V.

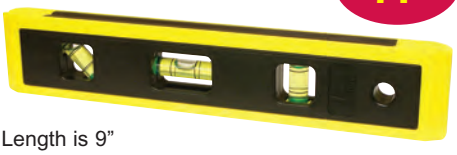
Round Cable Cutter
Model ST-211 — $11.95

The 100 pair group cutter is rated for ethernet, 100 pair group telephone cable, and RG-174/RG-9 coax. Spring return with safety lock.

Tape Measure 25' x 1"
Model ST-149 — $7.95

Inches and centimeters

Magnetic Torpedo Level
Model ST-150 — $7.95



Length is 9"

AC Voltage Detector Probe
Model ST-73 — $10.95

Detect AC voltages 120/240VAC without contact. Visual and audible indicators. Excellent for voltage tracing circuits.

AC Receptacle Tester w/ Built-in GFCI Tester
Model ST-38G — $6.95

UL listed. Gives instant display of wiring conditions of any standard 3-wire 110VAC outlet. Also tests GFCI.

Circuit Tester
Model ST-37 — $3.95

AC/DC 110-460 volts. Bright neon indicator, pocket clip, insulated case.

ELENCO® TELECOMMUNICATION TOOLS

Ceramic Kevlar® Cutter
Model ST-340 — $24.95

Easily trim Kevlar® strength member in fiber optic cable. The ceramic blades cut Kevlar® quickly and precisely.

Kevlar® is a registered trademark of the E.I. Dupont Company.

Cable Tie Gun
Model ST-375 — $34.95

Speeds up cable tie applications. Insures correct tension and provides automatic cutoff.

Can Wrench
Model ST-670 — $10.95

An easy-to-use tool that allows access to telephone boxes and pedestals. 3/8" and 7/16" hex double end, plastic handle.

Multi-Function Telephone Tool
Model ST-500 — $34.95

Crimps, cuts, and strips.
Steel frame gives long term durability. Ratchet construction for RJ-45/11/12 modular plugs. Cushion grip. 8 1/2" long.

Modular Crimping Tool
Model ST-568 — $24.95

Cuts, strips, and crimps modular plugs 8P/RJ45 and 6P/RJ12, RJ11. Cushion grip. 7 1/2" long.

Economy Crimping Tool
Model ST-560 — $19.95

Multi-function telephone tool crimps, cuts, and strips for 4, 6, and 8 pole modular plugs. Plastic construction. 8" long.

Deluxe Punch Down Tool Impact Type
Model ST-630 — $35.95

Extra blades $10.95 ea.

Adjustable pressure control. Suitable for 66 & 110 or KRONE terminal blocks. Includes (1) combination 66 & 88/110 blade. Storage for 1 spare blade in handle.
Replacement Blades: Type 66 (ST-601), KRONE Type (ST-603), Type 66 & 88/110 (ST-604)

Punch Down Tool
Model ST-620 — $18.95

Extra blades $10.95 ea.

Non-impact tool includes (1) combination 66 & 88/110 blade. Spare blade storage in handle included.
Replacement Blades: Type 66 (ST-601), Type 66 & 88/110 (ST-604), KRONE Type (ST-603)

Punch down blade for 66& 110/88
Model ST-604 — $10.95

66 & 110/88 Type Replacement Blade for ST620 and ST630

ELENCO® DATACOM TESTERS & TOOL KITS

Network Service Tool Kit

$149

Model TK-4000

A value of over $170!

A service and installation tool kit for networks, modems, and telephones. Includes quality, heavy-duty tools and a tester that will handle telephone cables with RJ-11 and RJ-45 connectors and coaxial cable with F or BNC connectors.

Includes the Following:

- **TCT-355** Phone/coax cable tester
- **ST-38G** AC receptacle tester
- **ST-35** Coaxial cable stripper
- **ST-568** Modular crimping tool
- **ST-60** Hex-type crimping tool
- **ST-75** 11 pc. screwdriver bit set
- **ST-620** Punch down tool with blade
- **ST-211** Round cable cutter
- **C-30** Parts box
- **C-200** Carrying case

Telecom Installation Service Tool Kit

$99.95

Model TK-4010

A value of over $120!

An installation and service tool kit for networks, telephones, and modems. Includes heavy-duty tool pouch and tester that will handle telephone cables with RJ11 and RJ45 connectors.

Case only Model C-190 **$15.95**

Includes the Following:

- **C-190** Tool pouch with belt
- **TCT-355** Phone / coax cable tester
- **ST-568** Modular crimping tool
- **ST-630** Punch down tool
- **ST-38G** AC receptacle tester
- **ST-85** 6-in-1 Driver set (phillips #1 and #2, slotted 3/16" and 1/4")
- **ST-1** 4 1/2" Diagonal cutters
- **ST-2** 5" Long nose pliers

Tone Generator / Probe Set

$44.95 set

Model TPG-70

The Model TPG-70 includes both TP-20 (probe) and TG-50 (generator). Technicians and installers can quickly locate wires in applications such as **TeleCom**, **Networking**, **CATV**, **HVAC**, **Electrical**, and **Automotive Circuits**.

Carrying Case Included

Probe

Features

- Use to locate termination point of all types of communication cables.
- Single or dual tone with adjustable volume.
- Audible continuity on telco and bare wires.
- LED signal confirmation.
- Probe works with any tone generator.
- Non-conductive plastic tip for safety.
- Low battery indicator.

Generator

Also Sold Separately (TP-20 Probe - $29.95) (TG-50 Generator - $29.95)

Multi-Network Cable Tester

Model TCT-355

$39.95

The TCT-355 Cable Tester is a convenient instrument for testing different shielded/unshielded wiring schemed communication cable with RJ-11 and RJ-45 connectors and BNC cable. This tester can be used for testing cables before and/or after they are installed. Testing status is indicated by multiple LEDs. Soft vinyl case provides storage for the tester, remote and terminator.

Features

- Tests RJ45 TIA568A/B (AT&T 258A), 10 Base-T, token ring, RJ11/RJ12, USOC and coaxial BNC cable.
- Automatically check cable for continuity, shorted, open and crossed wire pairs.
- Coaxial BNC cable port identifies cable conditions including shorts, shield opens, and center conductor breaks.
- Main unit and remote allow one person testing.
- Terminator and carrying case included.

Requires one (1) "9V" battery.

Cable Tester

Remote

Carrying Case

Terminator

ELENCO® ELECTRONIC TECHNICIAN TOOL KITS

Deluxe 32 pc. Technician Tool Kit
Model TK-1500

$64.95

A value of over $75!

Case Only (C-200) $14.95

Dimensions:
9" (H) x 14 3/4" (W) x 2 1/4" (D)

Includes the following

- **M-1000** Digital multimeter
- **SR-2B** Soldering iron, 25W, 3-wire grounded plug
- **SE-1** Solder ease kit (4 pcs.)
- **SP-4** Desoldering vacuum pump
- **ST-1** 4 1/2" diagonal cutters, return spring, cushion grip
- **ST-2** 5" needle nose pliers, return spring, cushion grip
- **C-10** Parts box
- **ST-30** Premium wire stripper, cutter, pliers, & crimper. Cushion grip.
- **ET-10** IC puller, stainless steel, vinyl grip
- **SH-2** Soldering iron stand (wire form)
- **TL-8** 6 pc. precision screwdriver set
- **LF-99** Solder tube lead-free
- **SW-3** Desoldering wick
- **C-200** Case
- **ST-75** 11 pc. screwdriver bit set (3 nut drivers, 2 phillips, 2 slotted, & 3 star bits)

All contained in a black vinyl zippered case with handles.

Deluxe 25 pc. Electronic Technician Tool Kit
Model TK-2000

A value of over $70!

2 Year Warranty

Case Only (C-500) $24

$64.95

Dimensions:
13 3/4" (H) x 8 1/4" (W) x 6 3/4" (D)

WEAR SAFETY GLASSES

see page 65

Tools in Case (C-500)

- **SR-2B** Soldering iron, 25W, 3-wire grounded plug
- **ST-1** 4 1/2" diagonal cutters, return spring, cushion grip
- **ST-2** 5" long nose pliers, return spring, cushion grip
- **ST-3** 5" adjustable wire strippers, cushion grip
- **SH-1** Soldering iron holder with sponge
- **SP-4** Desoldering vacuum pump
- **SE-1** Solder ease kit (4 pcs.)
- **TL-8** Precision screwdriver set (6 pcs.) in case
- **ST-5** Slotted 3/16" screwdriver, chrome vanadium
- **ST-6** Phillips #1 screwdriver, chrome vanadium
- **ND-3** 3-piece nut driver set, 3/16", 1/4", and 5/16"
- **ET-10** IC puller, stainless steel, vinyl grip
- **ST-20** Safety goggles
- **LF-99** Solder tube lead-free
- **SW-3** Desoldering wick

Deluxe 31pc. Technician Tool Kit
Model TK-1200

$59.95

A value of over $70!

All contained in a black vinyl zippered case (C-200).

Dimensions:
14 3/4" x 9" x 2 1/4"

Includes the following:

- **ET-10** IC puller
- **ET-14** IC inserter 14-16 pin
- **PR-3** 3-prong parts retriever
- **PT-1** Spare parts tube
- **SE-1** Solder ease kit
- **SH-2** Solder iron stand (wire form)
- **SP-4** Desoldering pump
- **SR-2B** Deluxe 25W soldering iron
- **ST-1** 4 1/2" Diagonal cutters
- **ST-2** 5" Needle nose pliers
- **LF-99** Solder lead-free
- **ST-5** 3/16" Slotted screwdriver
- **ST-6** #1 Phillips screwdriver
- **ST-17** Tweezers
- **ST-30** Premium wire stripper
- **ST-75** 11pc. Screwdriver bit set (3 nut drivers, 2 slotted, 2 phillips, and 3 torx bits)
- **ST-101A** 1/8" Slotted screwdriver
- **ST-101B** #0 Phillips screwdriver
- **C-200** Case

15pc. Basic Technician Tool Kit
Model TK-1350

$44.95

A value of over $55!

Case Only (C-200) $14.95

Includes the following

- **C-200** Case
- **SR-2B** Deluxe soldering iron
- **ST-1** 4 1/2" diagonal cutters
- **ST-2** 5" needle nose pliers
- **ST-30** Premium wire stripper
- **ST-5** 3/16" slotted screwdriver
- **ST-6** #1 phillips screwdriver
- **ST-101A** 1/8" slotted screwdriver
- **ST-101B** #0 phillips screwdriver
- **SP-4** Desoldering pump
- **SH-2** Soldering iron stand (wire form)
- **LF-99** Solder tube lead-free
- **ND-3** Nut driver set, 3/16", 1/4", & 5/16"

High quality tools in black vinyl zippered case.

Dimensions:
7" (H) x 13" (W) x 2" (D)

ELENCO® DELUXE ELECTRONIC TOOL KITS

Tool Kit Model TK-3000

A professional technician service tool kit in a metal reinforced tool case with heavy-duty handle and locks. A removable, double-sided pallet handles most of the tools listed below with more room for tools and parts in the lower half. A special ramp in the tool case will lock your meter of choice in place.

$99.95

WEAR SAFETY GLASSES

Tools Included in Case (C-400):

A value of over $110!

- **SR-2B** Deluxe 25W soldering iron
- **SH-1** Soldering iron holder
- **ST-1** Mini diagonal cutters
- **ST-2** Mini long nose pliers
- **ST-30** Premium wire stripper
- **SE-1** Solder ease kit (4 pc.)
- **TL-8** Precision screwdriver set (6 precision screwdrivers)
- **SW-3** Desoldering wick
- **ST-72** Screwdriver slotted 3/16"
- **ST-71** Screwdriver #1 phillips
- **ET-10** IC puller
- **SP-4** Desoldering pump
- **ST-20** Safety goggles
- **ST-9** Pocket screwdriver
- **LF-99** Solder tube lead-free
- **ST-75** 11 pc. screwdriver bit set (3 nut drivers, 2 slotted, 2 phillips, & 3 torx bits)

Case Only (C-400) $44.95

See our meters on pages 58 & 59.

Dimensions: 13" (L) x 18" (W) x 6 1/2" (D)

Tool Kit Model TK-1001

New in the electronics educational field. A professional organizer tool kit at affordable prices. No student should be without this unique tool kit that holds all of the tools you need (meter, experiments, etc.).

A value of over $85!

Tools Included in Soft Case (C-800):

- **ET-10** IC puller
- **LF-99** Solder tube lead-free
- **SE-1** Solder ease kit (4 pc.)
- **SH-3** Soldering iron holder
- **SP-4** Desoldering pump
- **SR-2B** Deluxe 25W soldering iron
- **ST-1** Mini diagonal cutters
- **ST-2** Mini long nose pliers
- **ST-3** Wire stripper
- **ST-20** Safety goggles
- **ST-75** 11 pc. screwdriver bit set (3 nut drivers, 2 slotted, 2 phillips, & 3 torx bits)
- **SW-3** Desoldering wick
- **TL-8** Precision screwdriver set (6 precision screwdrivers)
- Extra room for a multimeter (sold separately).

See our meters on pages 58 & 59

$59.95

Side pockets for extra storage

WEAR SAFETY GLASSES

Case only C-800 $34.95

Dimensions (case closed): 11" (L) x 14 1/4" (W) x 4" (D)

Electricians General-Purpose Tool Kit

Model TK-8010

$79.95

A tool kit designed for electricians and maintenance people. Includes a heavy-duty tool pouch made from tough canvas material and an adjustable quick-release belt.

A value of over $90!

Includes the following:

- **C-190** Tool pouch with belt
- **ST-36** Electricians knife
- **ST-30Y** Wire stripper
- **ST-26** Diagonal cutters 6"
- **ST-34** Long nose pliers 6"
- **ST-71A** #2x6" Phillips screwdriver
- **ST-73** Voltage detector probe
- **ST-72** 3/16"x6" Slotted screwdriver
- **ST-82A** 1/4"x6" Slotted screwdriver
- **ST-97** 10" Locking pliers
- **ST-70** 8" Linesman pliers
- **ST-38G** AC receptacle tester
- **ST-149** Power tape 25' x 1"

C-190 case, sold separately, only $15.95

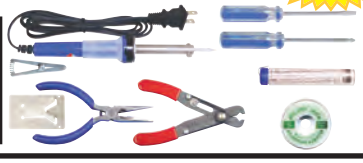
$17.95

9 Piece Electronic Technician Starter Tool Kit Model TK-14

A value of over $20!

Includes:

- **SR-1N** Standard 30 soldering iron
- **SH-2** Soldering iron stand
- **ST-2** 5" needle nose pliers
- **ST-3** Wire stripper
- **LF-99** Solder lead-free
- **ST-5** 3/16" slotted screwdriver
- **ST-6** #1 phillips screwdriver
- **ST-23** Heat sink
- **SW-3** Desoldering wick



$11.95

Hand Tool Kit Model ST-10

Includes

- **ST-1** 4 1/2" diagonal cutters
- **ST-2** 5" needle nose pliers
- **ST-3** Wire stripper
- **ST-5** 3/16" slotted screwdriver
- **ST-6** #1 phillips screwdriver

HVAC Technician Master Tool Kits

$179

Model TK-8100

C-800 case sold separately, only $34.95

2 YEAR WARRANTY ANY TOOL IN THESE KITS.

A complete tool kit for the troubleshooting of HVAC systems includes two meters for making all critical voltage, current, and temperature measurements.

Both include the following in the case shown:

- **M-2625A** Autoranging meter with temperature
- **ST-1012** Clamp meter
- **ST-95** 8" groove pliers
- **ND-3** Nut drivers 3/16", 1/4", 5/16"
- **ST-26** Diagonal pliers
- **ST-34** Long nose pliers
- **ST-71** #1 phillips screwdriver
- **ST-71A** #2 phillips screwdriver
- **ST-72** 3/16" slotted screwdriver
- **ST-72A** 1/4" slotted screwdriver
- **ST-74** AC line splitter
- **ST-73** AC voltage detector probe
- **ST-32** Inspection flashlight
- **ST-38G** AC receptacle tester

$159

Model TK-8200

C-180 case sold separately, only $24.95

NEW!

HVAC Technician Master Tool Kit
Model TK-8500

$159

Quality refrigeration/air-conditioning products and tube working tools, in a durable, portable tool bag. It features 17 pockets of variable sizes to store your tools and equipment.

Includes the following:

- **AC400-36** Gauge manifold (with hose)
- **C180** Portable tool bag
- **ST1012** Clamp meter with temperature
- **ST34** 6" Long nose pliers
- **ST20** Safety goggles
- **ST30Y** Deluxe wire stripper
- **ST59** 8" Adjustable wrench
- **ST97** 10" locking pliers
- **ST70** Linesman Pliers
- **ST85** 6-in-1 Driver set
- **ST125** 6pc. Screwdriver set
- **ST136** Ratchet wrench
- **ST137** Tube Bender
- **ST142** Mini tubing cutter
- **TK300** Tube working kit

A+ We will custom pack a tool kit to fulfill your certification program.

Deluxe 50pc. Computer Technician Service Tool Kit
Model TK-1700

A complete tool kit for the repairing and maintaining of computers and electronic devices. Included in this kit is a powerful mini vacuum with attachments and a pressurized canned-duster to remove debris or dust. OVER 50 ITEMS.

$99.95

ST-75 11 pc. screwdriver set
SH-2 Soldering iron stand
LF-99 Solder tube lead-free
SR-1 25 watt soldering iron
PR-3 Parts retriever
MSV-1 Mini vacuum with 3 attachments
ET-10 IC puller
ST-44 Anti-static wipes
C-200 Large zipper case with handles
Sold separately only $14.95.
TL-8 Precision screwdriver set
WS-1 Anti-static wrist strap
ST-32 Inspection flash light
ST-15 9 pc. allen wrench set
ST-43 10 cotton swabs
ST-49 Precision duster 10 oz.
ST-16 Crossover tweezers
C-30 Spare parts container
ST-2 Mini long nose pliers
ST-3 Wire stripper
"AA" Batteries (2)
ST-1 Mini diagonal cutters
SW-3 Desoldering wick
ST-11 #0 phillips pocket screwdriver
ST-72 #1 phillips screwdriver (9" overall)
ST-71 3/16" slotted screwdriver (9" overall)

A value of over $100!

WEAR SAFETY GLASSES

see page 65

Dimensions: 14 3/4" x 9" x 2 1/4"

Quantity Discounts Available!

ELENCO® PROBES AND TEST LEADS

Scope Probe, Switchable

Built-in 2 position switch; X1, X10, complete with accessories, 10MΩ input impedance. Fits all scopes with BNC connector. Compensation range 10 to 35pF. Includes minigrabber, insulating tip, adjusting tool, channel identifier clips, and IC tip. Length - 60".

$16.95 (P1E) 65MHz

$24.95 (P2E) 100MHz

250MHz Scope Probe, Switchable

P-3E

OUR BEST!

Built-in 3 position switch; X1, X10, ref. Complete with accessories. 10MΩ input impedance. Fits all scopes with BNC connector. Compensation range 10 to 35pF. Length - 60".

$29.95

TL-3

BNC to Minigrabber Test Lead Set

50Ω Length 42"

$5.95

TL-7

BNC to BNC Cable

50Ω RG58U Length 36"

$3.95

TL-17

BNC to Alligator Clips Test Lead Set

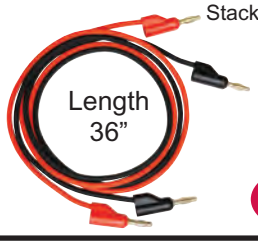
Length 48"

$5.49

TL-18

Banana to Banana Lead Set

Stackable side and back



$5.49

TL-6LG

Alligator Lead Set (10 pc.) with Large Alligator Clips

Length 36"

$8.95

TL-6

Alligator Lead Set (10 pc.) with Small Alligator Clips

$5.95

Length 14"

TL-15

Banana to Probe (w/ attachable alligator clips) Heavy-Duty Test Lead Set

Length 36"

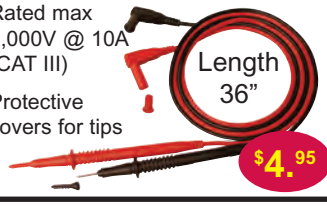
$7.95

TL-22

Banana to Probe Heavy-duty Test Lead Set

Rated max 1,000V @ 10A (CAT III)

Protective covers for tips



$4.95

TL-14

Banana to Probe (with sleeve) Test Lead Set

TL-4

Banana to Probe Test Lead Set

TL-16

Banana to Alligator Lead Set with Large Alligator Clips

TL-5

Banana to Alligator Lead Set with Small Alligator Clips

TL-21

Minigrabber to Minigrabber IC Test Lead Set (5 pc.)

Length 12"

TL-12

Banana to Minigrabber Test Lead Set

Length 36"

TL-9

Minigrabber to Minigrabber Test Lead Set

Length 36"

$5.95

TL-13

Banana to Alligator Clip Component Test Lead Set

Length 6"

$2.95

TL-30

Fully Insulated Alligator Clip Adapters

Push-on to most test probes

$1.95

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